Pan African Sanctuary Alliance (PASA)

Operations Manual

1st Edition

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DISCLAIMER AND STATEMENT OF INTENT

This inaugural "Operations Manual 2009" aims to provide guidance to PASA and others and should not be read as a constitution for the PASA organization.

The Operations Manual 2009 represents a starting point for documentation of agreed operational structure, principles and procedures of PASA with a view to enhancing efficiency of our organization and providing a core reference on procedure. We* recognize that this document cannot meet the expectations of every user nor be as up-to-date as the many issues that challenge its format, structure and content. As a result, this document should be read as a guide rather than a “rule book”.

We* have collectively prepared this manual with a view to providing guidance to staff, Board members, sanctuary members and other partners. It should enable all readers to understand the key roles of all players in our network and how we go about our business as a collective with common goals and tremendous goodwill. It should provide broad terms of reference for the various players in PASA and help deal with some decision processes or areas of conflict between players. It should also clarify procedures relating to key areas of our operation and the standards by which we all agree to operate in sanctuaries.

This Operations Manual is a 'living document' and will be updated on a regular basis and supplemented with changes in policies, priorities and procedures. This manual will therefore serve as the foundation from which changes and improvements will be made and it should not be read as the final or latest word on organizational policy.

The Operations Manual is best viewed in full, not in part, and used only for the purposes intended. It should not be copied or redistributed without express permission of PASA. When cited the document should be referred to as:


Distribution: This operating manual has a limited distribution to members of PASA, sanctuaries engaged in the application process for membership and key stakeholders - they gain access primarily through an authorized website. Updates are regularly made both to its general contents and to standards of care for wildlife and can be accessed on the authorized website. PASA members are required to stay up-to-date of these improvements.

(* the original draft was prepared by elected members of the Steering Committee – now called Advisory Council – and was provided for comment to all member sanctuaries, staff, Board Members and a number of external experts and advisors.)
ACKNOWLEDGEMENTS

The 1st Edition of the PASA Operations Manual reflects a decade of communication and collaboration between the African primate sanctuary community and a wealth of partners and stakeholders from across the globe that are too numerous to mention, but we thank you all.

The development of the manual was supported with a grant provided to K.H. Farmer by the Universities Federation for Animal Welfare (UFAW), and logistical support by the University of Stirling.

A special thank-you goes to Professor H.M. Buchanan-Smith for her comments and advice, to Dr. Lois Bassett for proof reading, and to Alison Giles for assistance with formatting.
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<td>Board of Directors</td>
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<td>Convention of Biological Diversity</td>
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<td>Convention in the Trade of Endangered Species</td>
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<td>International Air Transport Association</td>
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EXECUTIVE SUMMARY

Founded in 2000, The Pan African Sanctuary Alliance (PASA) is a nonprofit organization dedicated to strengthening, supporting and advancing the work of accredited sanctuaries across Africa. Membership to PASA is ascribed through voluntary adherence to codes of conduct, policies and rigorous standards for primate care, conservation and education. With 18 accredited members (and many others waiting to join), that are caring for thousands of primates, PASA has built Africa’s largest primate protection and conservation community.

PASA does not run primate sanctuaries but helps sanctuaries to care for African primates, to protect their wild-counterparts, and to promote the intrinsic value of nature. With the establishment of clear and specific standards and guidance on the humane care of the various primate species within African sanctuaries, on conservation and educational directives, and the provision of an accreditation process for the field, PASA facilitates opportunities for national, regional and continental cooperation and capacity building.

This Operations Manual has been developed to serve a number of important functions:

1. Outline the role of African primate sanctuaries in the welfare and conservation of species;
2. Outline the key objectives of PASA and formal structure supporting the network of member sanctuaries;
3. Update and formalise PASA’s Codes of Conduct, Policies, Operational Philosophy and Principles;
4. Define the Minimum Standards and Best Practice Guidelines for sanctuary management and operations; veterinary and human health and welfare; re-introduction; and conservation education, environmental communication and advocacy.
5. Describe the membership and accreditation procedures by which PASA assesses performance against these standards.

Accredited primate sanctuaries must maintain compliance to the Codes, Policies and Minimum Standards described herein to sustain their membership. In times of crisis and challenge, PASA works tirelessly to support its members. Best Practice Guidelines are designed to aid sanctuaries in striving for continuous improvement beyond the Minimum Standards. The intention is to help maintain a high standard of conduct among members of PASA, thereby ensuring responsible stewardship of the species entrusted to their care, thus confirming their position as leaders in the sanctuary community.

PASA has developed its own accreditation and inspection system, to ensure that only sanctuaries that comply with the obligations of membership may join the organization. The PASA accreditation procedure offers a framework to assist sanctuaries in achieving their aims. PASA accreditation brings greater transparency and confidence in PASA and its members. Donors, partner organizations and governments can rely on the accreditation process to objectively verify that PASA accredited sanctuaries exemplify excellence, and are providing primates with the standards of care that they deserve.

New and established primate sanctuaries in Africa are directed to the manual to guide their development and future management practice. This will help ensure consistent approaches and high quality processes are followed, allowing sanctuaries to demonstrate conformance to others or make a self-declaration of conformance with the standards outlined.
Each component of the standards specifies mandatory required outcomes (described as goals and aims) which define the quality of a management practice that must be achieved. Guidance is provided on how each outcome may be achieved. Where there are other means of achieving the required outcome, sanctuary managers are free to adopt strategies of their own choice, provided they can demonstrate equivalence of outcome and that the intent of the guidance has been met.

The Manual outlines an accreditation process with evidence requirements. These requirements indicate the type of objective evidence that an inspector would present during the accreditation process to verify that a facility is achieving the required outcomes and that they can be sustained.

The Manual should be read as a whole and not as a series of independent requirements as many of these requirements are inter-related with others, and compliance depends on them being used in an on-going and integrated manner.

Additional assistance in applying the requirements of the Manual is available through PASA accredited supplementary information such as the PASA Primate Veterinary Health Manual which is available on the PASA website.

In consultation with stakeholders, the Manual itself will be the subject of a continual improvement process.

Whilst we and all our members would like to see a day when sanctuaries become redundant, we welcome new facilities to become members of PASA, thereby maximizing their contribution to the field. As long as our profession is guided by PASA Codes, Policies, Principles and Minimum Standards, our work will be increasingly respected and recognized.

"PASA is committed to the conservation and care of African primates through the unique alliance of African sanctuaries"
PART 1: AFRICAN PRIMATE SANCTUARIES

The following section provides a brief overview of the threats faced by primates in Africa and describes how sanctuaries work to address these conservation challenges and promote respect for African primates.

1.1 Situation analysis for African primates

A recent global review of the world's primates found that 48% of species face extinction, and that 37% of primate species in Africa are endangered\(^1\). All species of African apes are listed as endangered or critically endangered.

Field reports from across the continent show that increasingly unsustainable demands on natural resources are a major factor in biodiversity decline in general and wild primate populations in particular. Many of the social and institutional factors behind this demand are well documented and include:

- Drivers of economic growth at local, national and international scales in Africa have focussed almost exclusively on the exploitation of natural resources, particularly timber and non-timber forest products, minerals and petroleum and land conversion to agriculture. This has resulted in significant habitat loss;
- Political drivers have often prioritised short-term human development over longer-term environmental health, failing to recognize that the protection and enhancement of functioning ecosystems, and the services they provide, will underpin future economic growth;
- Limited government capacity and commitment and capacity to manage protected areas or enforce wildlife laws, and to implement multi-national, national, regional or provincial strategies and management plans effectively;
- Weak governance arrangements that often undermine responses to environmental crises. In other words, the processes of debating, deciding and taking action on policy goals between government and non-government actors, are underdeveloped or unclear. The result is ineffective control of human uses of natural resources;
- Rural livelihood strategies and urbanisation have combined to create unsustainable commercial markets in wildlife and plant resources. This is particularly evident in the bushmeat and pet trades;
- Growing and mobile human populations, often moving in response to political, social or environmental instability;
- Widespread availability of firearms, new technology and road networks are making hunting increasingly efficient; and
- The demand for the capture of wild-born apes is still high in some parts of the world (e.g., The Middle East, South America and Eastern Europe).

There are also a number of environmental factors that are exacerbating the declining conservation status of many primates. These include, but are not limited to:

- The expected influence of climate change on the composition of ecosystems and the spatial distribution and abundance of species and communities. Climate change has the potential to alter the local ecological niche of species and place them near the limits of their physiological tolerance. The impacts on human demographic and land-use change, consumption and natural resource management are unclear but will also be significant;

Emerging infectious disease transmission is likely to increase with changing species distributions and as people come into closer contact with wildlife through habitat fragmentation; and

The biology of many species, in particular the large body size of great apes, is intrinsically associated with higher risks of extinction. In general large mammals are expected to have smaller population sizes, larger area requirements and lower reproductive rates. Such factors restrict the recovery of populations.

1.2 The role of sanctuaries in primate welfare and conservation

There has been a gradual increase in the number of primate sanctuaries in Africa since the first documented facility in the early 1970’s. In 2009, there are eighteen PASA accredited sanctuaries across West, Central, East and South Africa that are responsible for the management of thousands of primates, many of which are classified as Endangered or Critically Endangered\(^2\). These species include: the bonobo (*Pan paniscus*); drill (*Mandrillus leucophaeus*); gorilla (*Gorilla gorilla gorilla*); chimpanzee (*Pan troglodytes*); and Preuss’s guenon (*Cercopithecus preussi*).

One of the first indicators that threats to African primate populations were increasing was the growing number of orphaned infants arriving in urban centres, by-products of the illegal trade in bushmeat. While many have range countries already has wildlife laws in place, there was little capacity to implement them or manage confiscated primates. As a result, the establishment of sanctuaries represented an emergency response to providing for the immediate welfare needs of those animals. Over time other sanctuaries have formed with different management goals, such as re-introduction and habitat protection, which were designed to help solve related sets of problems at the supply end of the trade in primates.

Sanctuaries are playing increasingly important *in-situ* roles in managing primate populations and contributing to species and biodiversity conservation goals. Particular areas of activity and expertise include:

- **Facilitation of law enforcement**: by providing the technical expertise to facilitate confiscation of a primate. It is significant that over half of all apes in PASA member sanctuaries have been confiscated\(^3\). Poor law enforcement sends mixed messages to communities and undermines both national and international legislation regarding wildlife protection.

- **Provision of an immediate and long-term solution for the management of captive primates**: *in-situ* sanctuaries manage the risks of zoonotic disease transmission through implementing strict quarantine protocols, and provide triage and rehabilitation for physically and psychologically damaged primates. PASA accredited sanctuaries also manage captive populations in such a way as to allow for future re-introduction where appropriate.

- **Development of strategic partnerships and operational relationships between all levels of government, national and international NGOs, investors and communities**. Many primate sanctuaries have been operating urban facilities and field sites *in-situ* for many years, made possible by the nurturing of these relationships and the commitment to local communities.

- **Conservation education**: Over three-quarters of PASA member sanctuaries actively participate in conservation education through a variety of methods in both urban and rural settings\(^3\). These include: on-site visits by the general public and school parties, interpretive displays and presentations, employment of education officers, nature clubs, activity packs, workshops and outreach programmes and collaborating with national and international media.

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Re-introduction of endangered species: PASA member sanctuaries are leading the way in implementing re-introduction programs for African primates. Undertaken in partnership with government and community stakeholders, there are a number of steps involved in the process of re-introduction that can each have significant conservation impact. These include a process of environmental surveys and site assessments which identify and ground truth existing priorities, management plans, data and gaps; site preparation and protection which can reduce threats and improve the quality and extent of habitat areas; and release and bio-monitoring which can establish baseline data and regimes for tracking the environmental health of an area. Presently, seven PASA member sanctuaries are actively engaged in one or more elements of the re-introduction process.

Research: sanctuaries are involved in scientific data collection and analyses for individual species and biodiversity (behavioural and biological) as well as some community development elements of conservation. In the past these have included biodiversity surveys, species densities and distributions, threat assessments and a range of social surveys. Typically this information guides the design of sanctuary programs, informs adaptive management and where appropriate provides input into government policy processes.

PASA member sanctuaries undertake many of these activities in a multi-disciplinary approach to conservation. They are aimed at addressing complex and dynamic sets of problems that require specific knowledge and expertise. Sanctuaries are on a long trajectory of learning and development, and many are now considered expert in these areas.

The ability of sanctuaries to contribute to local area and species conservation goals is also due to the development of critical attributes that have enabled them to become embedded in their countries and communities of operation. Such attributes include:

- Acting as institutional bridges between governments and donor agencies, and between projects and local people in project areas;
- Being sensitive to local needs, flexible and inclined to find site-specific solutions to problems;
- Being the source of new ideas and project concepts;
- Promoting a consultative, bottom-up style of planning and implementation;
- Responding well to opportunities to form partnerships amongst themselves and with governments and donor agencies;
- Playing strong advocacy roles helping governments to see forests as more than just stockpiles of wood and identifying the broader economic values of ecosystem services.
PART 2: THE PAN AFRICAN SANCTUARY ALLIANCE (PASA)

The following section describes the unifying and capacity building role that the Pan African Sanctuary Alliance (PASA) brings to sanctuary management. The status and organizational structure of PASA are presented.

In 2000, the Jane Goodall Institute (JGI), the Conservation Breeding Specialist Group (CBSG) and the IUCN/SSC Primate Specialist Group collaborated to bring a number of African primate sanctuaries together for the first time. A number of important realizations occurred at this meeting:

- There were different perceptions about the role of sanctuaries particularly around issues of welfare and conservation;
- Sanctuaries were wary of cooperating with each other and often competed for funding; and
- Sanctuaries were operating according a range of principles, philosophies and management goals, some of which were in conflict.

The outcome of the meeting was that PASA was formed, with a mandate to play a central coordination role in establishing common standards and shared goals across a number of program areas and supporting sanctuaries in their efforts to protect primates. Initially this role was focused on strengthening operational capacity in a number of critical areas of sanctuary management. Ten years on many of the sanctuaries now have the infrastructure, human resources and expertise, relationships and legal agreements in place to respond to most emergency situations around primate health and welfare.

In this time, many sanctuaries have also become highly proactive in helping address the casual factors of declining primate populations, undertaking the types of activities described in Part 1. In response, PASA is more broadly encouraging sanctuaries to operate within an integrated approach to conserving species and biodiversity, and has developed a number of key principles to guide the activities of the Alliance.

2.1 Objectives of PASA

With the ultimate aim of increasing the conservation impact of sanctuary programs, PASA has three broad objectives around which the support for member sanctuaries is organized. They are to coordinate learning and strengthen human and institutional capacity; establish Minimum Standards and Best Practice Guidelines across key areas of sanctuary operations; and to advocate for all aspects of primate conservation at national and international levels.

2.1.1 Coordination of communication, learning and capacity building

It was quickly evident that the primate sanctuaries who participated in the inaugural meeting in 2000 came with significant knowledge and expertise in many areas of sanctuary management and conservation. Confronted by a wide range of planning and operational issues, some sanctuaries had been developing innovative and pragmatic solutions that had the potential to be transferred to other sanctuaries operating across Africa. To do this effectively, the first objective for PASA became the establishment of forums and processes for communication and learning, and the establishment of a formal network within which sanctuaries could share information and experience and develop capacity in critical areas of their work.

To deliver on this objective, PASA provides:

- Coordination of knowledge transfer and learning - reducing the cycle of trial and error for sanctuaries developing responses to shared issues;
- Facilitation of communication and collaboration both between sanctuaries and with other primate conservation organisations and programs in Africa; and
Professional development opportunities for sanctuary managers, national counterparts and project staff through identifying skills gaps and difficulties associated with responding to change (such as succession management and unstable operating environments).

Workshops, central reporting and information dissemination and partnership development represent the main mechanisms for delivering these services to sanctuaries.

There are two types of annual workshops run by PASA:

**Management workshops**

By running annual workshops and meetings, PASA has established a unique forum for practitioners to share learning, debate issues and explore areas of mutual concern and interest in all aspects of primate health, welfare and conservation. Issues discussed have included but are not limited to: sanctuary management (carrying capacity, financial management, policies and standards); staff training, health and welfare; animal health and welfare (animal husbandry, enrichment, veterinary medicine, reproduction); emergency response; partnership development; media; campaigning; re-introduction; organizational development; fundraising; conservation and education. These meetings have benefited from representations and presentations by a wide range of partners and stakeholders including government, donors, partner organizations from the conservation and welfare sector, research departments and institutions, and captive wildlife facilities.

Each year sanctuary managers and representatives are surveyed for pertinent topics of interest and relevant speakers and presentations are organized for the workshops. Within each management meeting, sanctuary managers hold a 'closed meeting' which operates on “Chatham House Rules”\(^4\).

The management meetings are normally held in an African country that either has a primate sanctuary or a need to focus on relevant issues. So far meetings have taken place in Cameroon, Kenya, Uganda, South Africa, Rwanda and Sierra Leone.

**Technical workshops**

PASA also designs, organizes and facilitates annual technical training workshops in animal health and welfare (veterinary based) and conservation education, environmental communication and advocacy (including community engagement). Other technical workshops have been held for primate re-introduction. Since 2003 these workshops have been hosted by various sanctuaries *in-situ*, with practical exercises underpinning an action learning process. The sanctuaries hosting the training workshops have benefited from the presence of experts in the field of conservation education and veterinary medicine, and resultant interventions, materials and projects left in place. In the near future, annual training workshops for primate keepers will be initiated. Training workshops are continually monitored and evolve to reflect best and emerging practice and knowledge, and will continue until deemed unnecessary.

**2.1.2 Development and implementation of Minimum Standards and Best Practice**

The second PASA Objective is to establish a framework for continuous improvement and to develop quality processes to deliver best practice sanctuary management and conservation. This Operations Manual has been developed by experts in the field and clearly describes PASA Minimum Standards and Best Practice Guidelines. The standards are informed by evidence-based and widely accepted management practices and have been designed to help sanctuaries to: (i) provide the best care possible for rescued

\(^4\) When a meeting, or part thereof, is held under the Chatham House Rule, participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed.
primates; (ii) facilitate sustainable management of sanctuaries; and (iii) contribute effectively to the conservation of species in the wild.

The standards are designed to be compatible with other relevant national and international quality and environmental standards; complement existing legislation and standards in primate welfare; and support multi-national and national approaches to species conservation. Primate sanctuaries are encouraged to integrate the Operations Manual with other business management and compliance systems that they may have in place.

The standards are also designed to give confidence to governments, investors, communities, to other interested parties and to primate sanctuaries themselves that investment in primate welfare and conservation is cost effective and contributes to the protection and improved conservation status of wild populations.

2.1.3 Effective international and national advocacy for primate conservation
The situation analysis for African primates necessitates concerted action at all levels of the conservation governance system. PASA is working towards this objective by participating in activities that are in harmony with international, national and/or regional conservation priorities, typically through active networking and the development of partnerships between governments, international law enforcement agencies, NGOs and member sanctuaries.

More specifically, PASA is playing a strong international role in advocating for a significant reduction in the trading of primates (live trade and primate parts) and for increased levels of wildlife law enforcement.

PASA also strongly advocates the in-situ role of member sanctuaries, highlighting their contributions to these goals at the local and regional level through the gathering of intelligence; provision of technical support to authorities; increasing the level of awareness of wildlife laws and health risks from trading and consuming bushmeat; and community development programs aimed at developing local alternatives to the hunting of endangered species.

The roles sanctuaries are playing are directly supporting the implementation of the Great Ape Conservation Act of 2000 (USA Public Law 106-411, 114 Stat. 1789-1794), that highlights priorities such as:

- Compliance with applicable laws that regulate the taking or trade of apes;
- Conservation education and community outreach (through national media);
- Strengthening of local capacity; and
- Wildlife enforcement and law enforcement.

2.2 Structure and status of PASA
The Pan African Sanctuary Alliance (PASA) is a 501 (c) 3 non-profit organization in the United States and all donations are tax-deductible (EIN: 22-3878683).

The formal structure of the PASA network and its supporters is shown in Figure 1 (p.8). This diagram is a model of the relationships within PASA including members, management, partners and supporters. It broadly describes the formal contracts that exist through its constitution, the delegation of authority and exchange of services and information. In particular, the sanctuaries that are members of PASA, have a “contract” with the registered NGO in USA. In this contract, they agree to pay fees, meet a suite of operating standards, act according to a code of conduct and provide support to other members in return for centralized management of common issues, high-level representation, support in times of crises, acquisition and distribution of resources and provision of capacity building services.
Behind this structure is a great deal of flexibility in the relationships and capacity to respond to new opportunities or crises. Each of the member sanctuaries works to achieve individual as well as cooperative goals, and through their membership in PASA agrees to a number of principles of cooperation, standards of operation and codes of conduct. All are geared to help achieve greater synergy and capacity in the network.

The Key Principles that underpin the operation and strategic direction of PASA are listed below. While the core values and principles illustrated here do not vary, there are regular changes in the strategic priorities of the organization in response to the conservation needs of primates and the needs of sanctuaries. A strategic plan is developed and agreed on a tri-annual basis to capture these needs and opportunities.

The roles and responsibilities of the key elements in the structure are broadly described in the following sections. The election procedures are consistent with the formal constitution of the organization and the policies set by the Board of Directors (BoD). Up-to-date details of any election and dismissal procedures, job descriptions and responsibilities can be obtained through the Chief Executive Officer (CEO) or BoD of PASA.

2.2.1 **Key principles of PASA**

The key principles of the organizational structure and relationships within the PASA network (Figure 1) are as follows:

1. PASA is a voluntary network comprised of organizations committed to working together for common conservation and animal welfare goals and committed to high standards of operation. Members are likewise committed to mutual support, appropriate sanctuary development and development of joint programs with high probability of conservation outcomes for primates. Members of PASA are keenly aware of the power of working together as a collective rather than working alone – the structure aims to reflect this.

2. Part of the collective bond of PASA is participation in a centralized organization as a fee-paying member that must meet certain standards of care, management and program delivery. PASA management is dedicated to supporting the goals and needs of its members, maintaining standards, enabling capacity building of members, enabling awareness of programs and representation in international key forums.

3. PASA is an inclusive network in which all member sanctuaries can contribute and participate in decision-making at many levels. Sanctuary needs and goals are at the forefront of decision-making and central to strategic planning of PASA.

4. All other participating organizations in the PASA network will have clear roles and relationships. The scope of such relationships is open as it encourages new and innovative approaches to common goals.

5. There are clear lines of communication (see Figure 1) that enhance decision-making, information sharing and collective action. As PASA is an open and inclusive network, communication occurs across and between all levels. However, official lines of communication are designed for maximum effectiveness.
Figure 1: Formal structure supporting the network of PASA sanctuaries

**KEY**

- Authority, responsibility, representation (defined by formal agreements)
- Time-limited (mutual) agreements
- Services to Member Sanctuaries (incl. communication)
- Communications
- Resources/co-investment
6. The BoD of PASA has oversight of distribution of key resources, services to sanctuaries, communication, risks to the organization and representation of the membership. The BoD is ultimately accountable under laws governing charitable organizations in the USA and to the PASA membership. The lines of authority and accountability are well-defined and transparent and meet the highest standards of governance. The delivery of services back to PASA members and the management of partnerships are achieved through a formal management structure and perform in accordance with a strategic plan as agreed by the membership.

7. An Advisory Council (AC) is elected by the membership of PASA and each is accountable through clear terms of reference. The scope of representation, membership, authority and responsibilities of the AC are defined and revised as needed and overseen by the Board on behalf of the membership of PASA. The AC plays a pivotal role in communication, design and delivery of programs and provision of advice to PASA senior management and the BoD. In return, the AC is supported by both management and the BoD.

2.2.2 PASA U.S. Board of Directors and general governance

PASA is governed by a U.S based Board of Directors (BoD). The BoD is responsible to the membership of PASA to help secure resources for PASA, to ensure that resources are appropriately utilized and distributed, that services are provided as agreed, that a suite of policies are developed to enable the organization to thrive and grow and meet its goals, that all aspects of management are fully accountable and meet the highest standards of performances and to protect the reputations and brand that represents "PASA". The board selects, empowers and has oversight of the CEO who manages the organizational affairs and represents the member at key forums.

The CEO ensures that the day to day operations run according to the strategic plan and needs of the member and that all reporting is completed. The CEO oversees delivery of services and support to the membership, manages relationships, secures resources and manages communications across the network. The BoD also enables and empowers the AC to carry out its work in key strategic areas on behalf of the membership and where possible includes the Chairperson of the AC as a member of the BoD or as standing advisor to the BoD.

The appointment of the inaugural BoD occurred in 2008 and current membership is listed on the PASA website along with brief biographies and interests. BoD appointments, rotations and rules of conduct are established by the constitution and are updated as required by change in policy by BoD.

The PASA BoD must comply with US law. Only American citizens are eligible to serve formally on the U.S. PASA BoD although it can appoint advisors who are not US citizens. While there is no established limit to the membership of the BoD, it is accepted that the minimum of 5 members is currently an appropriate number. Each member serves a three-year term, after which he or she is eligible for re-election. While it is not a requirement under US laws, the PASA BoD aims to establish election processes in the future that involve sanctuary managers - an election system may be established through simple majority vote of eligible candidates.

2.2.3 PASA Chief Executive Officer

The PASA Chief Executive Officer (CEO) is charged with managing all aspects of the day-to-day operations of the organization and delivery of strategic outcomes. The CEO represents the PASA organization and PASA network at key forums and in public and manages all internal and external relationships that affect the outcomes of PASA. The CEO works on behalf of the PASA membership to maximize benefits to members and
achieve best collective outcomes for primates in sanctuaries and in the wild wherever possible.

The CEO is appointed by the BoD and is accountable to the BoD for implementation of the strategic plan, all related management outcomes, policies and processes. The CEO is responsible for all budgetary issues, financial transactions, communications, sanctuary relations, crisis support, annual sanctuary meetings and service delivery to members. The CEO manages all PASA staff and contractors and external agreements for service delivery. The CEO also communicates directly with the AC, supports their role in PASA and helps insure that all appropriate actions and reporting are undertaken by the AC. Other duties reflect the strategic priorities of the organization and may include resource acquisition (fund raising, grant applications), international negotiations and transfers, marketing and merchandising.

2.2.4 PASA Advisory Council
The Advisory Council (AC) of PASA is critical to the operational success of the network, to its reputation and the quality of outcomes for sanctuaries and primate conservation. As a result this section goes into some detail to describe the relationship of the AC with the rest of the PASA organization and its members.

The PASA AC is an international advisory panel that provides strategic and technical advice to PASA. The areas covered by the AC may vary in accordance with the strategic priorities of the organization and currently include: operational standards for management of sanctuaries, conservation, health and welfare, conservation education, environmental communication and community engagement, political and regional relations, ecological and scientific issues that confront PASA, with a special emphasis on policy and operations in Africa. The goal is to enable PASA to establish best practice, gain international credibility for PASA and take relevant leadership in sanctuary management and local conservation of primates. The AC provides technical papers, policy recommendations and critical oversight of key programs as needed by PASA.

The authority of the AC is established by the BoD and facilitated by the CEO. From time to time the BoD may delegate great powers to the AC to ensure that programs are delivered in the most effective and efficient manner. These authorities will be defined by the BoD and the AC will report back to the BoD through its Chairperson and the CEO.

The AC is ultimately responsible to the membership and will encourage the membership to participate in program development, policy development, operational standards and other strategic issues. Some members of the AC are required to engage with sanctuary managers in each region to ensure their voices are heard. The AC has the capacity to take grievance on key issues directly to the Board for resolution if necessary - this process reflects the open communication available in the PASA network.

The AC has procedures in place to enable resolution of conflict and on a regular basis may vote on key issues such as membership (acceptance, suspension, expulsion), crisis care and emergency relief. The AC recommendations on membership and policy change ultimately go to the BoD of PASA. Management issues and emergency response or communication is undertaken with and through the CEO.

Duties of the AC include:
- Generally promote PASA’s mission and achievements;
- Provide advice on strategic direction of PASA to leverage necessary support (diplomatic, financial, technical, logistical);
- Provide direct lines of communication with sanctuary managers especially through the members of AC appointed as African representatives;
- Contribute to the development of the PASA strategic plan;
Contribute to the review and refinement of PASA’s Mission, Codes, Policies, Minimum Standards, Best Practice Guidelines and supporting documents to incorporate and reflect current trends, direction and best practice;

Contribute to the development of the annual budget;

Facilitate a review of sanctuary facilities with reference to compliance of Minimum Standards (Part 4) and Best Practice (Part 5);

Review applications of applying sanctuaries;

Facilitate organisation of, and contribute to, the annual workshops;

Administer the Siddle-Marsden annual award (Annex II) with the CEO;

Provide prompt and consistent guidance and support to the CEO as and when required in emerging situations;

Administer the PASA Crisis Fund (Annex III);

Monitor research being undertaken within PASA sanctuaries and make recommendations and offer assistance as appropriate;

Participation in annual strategic workshop to review performance and emerging issues.

The membership of the AC is selected to ensure both a broad range of relevant expertise and a capacity to relate the issues of sanctuary managers. The size of the AC and the expertise included in the AC reflects the strategic focus of PASA over a period of time. The selection criteria and standards of performance of AC members are very high and each position is necessarily demanding. Current membership of the AC is listed on the PASA website along with brief biographies and includes representatives from Africa, Europe, North America and Australia.

Three or four positions on the AC are designated for African sanctuary managers and these positions are generally rotated once every 3 years to facilitate full participation and input from the broad range of sanctuary facilities that PASA represents, and to ensure appropriate levels of communication and feedback on key issues. These positions carry with them special duties in relation to communication with other sanctuary managers on a regional basis.

Non-sanctuary members of the AC are up for re-election every three years. Nominations are drawn from a wide range of external and internal experts. Membership in the AC is determined through an electronic voting process by sanctuary managers at least 2 months prior to the management meetings. Elections are overseen by the CEO.

The Chairperson of the AC is a critical position that enables a direct link between sanctuaries and PASA management and provides recommendations to PASA membership, management and the BoD. The Chairperson is elected by members of the AC every three years. Candidates are nominated and a secret ballot is managed through the independent office of the CEO.

2.2.5 PASA Advisors

PASA also regularly consults and collaborates with a broad range of experts as and when required. These individuals are known as ‘Advisors’.

2.2.6 PASA Friends, Supporters, Collaborators

It is important that PASA develop strategic alliances with organizations that can help to achieve critical outcomes for the sanctuaries and for primate conservation. All alliances are established with clear exchanges of terms and conditions and with clear time-frames. These “contracts” are managed by the CEO and performance reported to the BoD. Delegations to enter into agreements are established by policy of the BoD who is ultimate responsible for the performance and accountability for any resource or legal implications of that relationship. Friends and Supporters of PASA are a future category for relationships and support for the organisation. The structure, operations and support of this area will be developed in the near future.
PART 3: PASA CODE OF CONDUCT, POLICIES AND PRINCIPLES

Membership to PASA is open to all primate sanctuaries in Africa who comply with PASA’s Codes of Conduct, Operational Philosophy, Principles, Policies and Minimum Standards, and in doing so fulfill the commitment to a high level of professionalism. This section defines what makes a PASA sanctuary, and presents the various codes, principles and policies. Sanctuaries wishing to become members of PASA should read this section carefully to ensure that their ethos reflects and is compatible with that of PASA. The accreditation process assesses sanctuary compliance to these various criteria (in addition to Minimum Standards as described in Part 4). Likewise to maintain membership, PASA Sanctuary Members must continue to exhibit the same level of professionalism and are advised to regularly consult this document to ensure that they remain compliant.

PASA does not own, manage, or otherwise control its member sanctuaries, and is not responsible for the financial, operational, or legal condition of its member sanctuaries. PASA is a separate organization that exists solely to support and coordinate to best effect the activities of the alliance as a whole.

3.1 PASA Mission Statement
PASA works to support the conservation and care of African primates through its unique alliance of African sanctuaries.

3.2 Definition of a PASA Sanctuary
A PASA member sanctuary provides a safe and secure home for ex-wild African primates in need. The welfare of the individual and the preservation of the species are of prime importance and are considered equally. The sanctuary operates in the context of an integrated approach to conservation, which can include rehabilitation and re-introduction.

PASA member sanctuaries do not seek to acquire primates for any purpose other than those considered in the best interest of the animal itself. PASA member sanctuaries do not purchase, sell, trade or otherwise receive or provide any compensation for primates.

3.3 PASA Code of Conduct
PASA will act in the best interest of its members. PASA has a unique obligation to the global community and this obligation demands that PASA member sanctuaries, and people representing PASA, exhibit standards of professional behaviour that will maintain public confidence and trust. The act of one individual or one organization could seriously affect the reputation and standing of PASA. Thus it is the responsibility of all PASA member sanctuaries and their staff to be vigilant and aware of the potential for misconduct, maintain high standards, and a strong sense of professionalism, and a commitment to the objectives of PASA (p.4-6).

The PASA Code of Conduct establishes standards of behavior expected of member sanctuaries and their staff and is a guide to solving ethical issues for those whose work involves caring for primates (and often other wildlife species) in sanctuaries situated in Africa. While no set rules can provide answers to all ethical questions that may arise, this code provides the framework for appropriate conduct in a variety of contexts. It is intended to convey the obligations placed on and the behaviour expected of all PASA member sanctuaries and their staff.

PASA member sanctuaries should familiarize themselves with the PASA Code of Conduct, and should ensure that they observe the provisions at all times. Where departure from the code has been suspected, PASA will issue a query, investigation or both. Disciplinary action, as needed, may be in the form of guidance, intervention and/or suspension from PASA as detailed in Membership and Accreditation Guidelines.
3.4 Operational Philosophy
The PASA Operational Philosophy assumes the following values underscore all PASA sanctuary operations:

- The conservation of the species is paramount, while taking into consideration the physical, emotional and social needs of the individual, and;
- Holistic and long-term approaches shall be adopted as the physical, emotional and social needs of the individual primate are addressed.

3.5 Principles
It is recognized that the range of activities undertaken by PASA member sanctuaries represents an integrated and multi-disciplinary approach to conservation, with urban facilities, field sites and protected areas being connected by a range of biodiversity and species conservation objectives.

Key principles include:
- Biological diversity is best conserved in-situ;
- PASA sanctuaries will assist in the conservation of wild primate populations and their natural habitats;
- PASA sanctuaries will give priority to species endemic to their geographic region;
- Animals under the guardianship of PASA sanctuaries will receive the highest possible level of care;
- Captive populations are managed in such a way that re-introduction is possible in future, if feasible and appropriate;
- Species conservation should contribute to broader biodiversity goals;
- Collaboration between government, conservation groups, resource users, indigenous peoples and the community in general is critical to achieving conservation goals. PASA sanctuaries should seek to establish working relationships with the relevant wildlife authorities and institutions;
- As far as possible, alignment and consistency between international, national and local conservation management approaches should be pursued;

Box 1: PASA Code of Conduct:
PASA member sanctuaries and all staff embrace a number of core values:

- A concern for primates and all other wildlife;
- Respect for the laws, traditions and cultures of host nations;
- Integrity in the conduct of staff and sanctuary operations;
- Transparency in all legal, financial and professional dealings;
- Fairness in relations with staff, support personnel and partners;
- Professionalism in all facets of sanctuary operation;
- Personal and institutional commitment to conservation.

It is the duty of all PASA member sanctuaries and their staff to observe the following requirements:

- To act within and uphold local, national and international laws;
- To maintain the integrity of PASA;
- Not to abuse their official position or connection with PASA for personal gain;
- Not to misrepresent their position within PASA.
• Actions should be planned at the appropriate biological, spatial and temporal scales; be based on scientific principles; and recognize the complexity and linkages within natural and social systems;
• Programs should be flexible enough to adapt to changing circumstances or improved knowledge and understanding;
• Where there is a lack of full knowledge and activities present high risk, the precautionary principle must be applied;
• Research that compromises the well-being of individuals cannot be considered.
Use of primates as pets and/or for entertainment of any kind is not accepted by PASA and its member sanctuaries; and
• Sanctuaries must operate within an ethic of continuous improvement.

3.6 PASA Policies

3.6.1 Captive primate management policies

3.6.1.1 Animal acquisition
No PASA member sanctuary is allowed to purchase or provide compensation as a condition of acquiring any primate. PASA member sanctuaries must not engage a third party, even a government official, to do so on their behalf. PASA member sanctuaries agree to make every effort to facilitate legal and judicial processes. All primates must be confiscated by relevant authorities, or surrendered by the person/s holding the animals. Every effort should be made to educate the person/s in a positive and an interactive way.

PASA member sanctuaries agree to provide the best care and facilities for any confiscated primate.

PASA member sanctuaries shall ensure that the relevant legal documentation is obtained to be in legal possession of the primates in their care.

PASA member sanctuaries agree to cooperate with other PASA member sanctuaries in the placement of animals in the most appropriate facility for the individual, taking into consideration the species or subspecies, natural origins, the welfare of the individual and the possibility for integration into a social group.

PASA member sanctuaries are forbidden to sell, trade, loan or otherwise traffic in primates that have been placed in PASA member sanctuaries, except for situations that are judged to be in the best interest of the primates.

PASA and its members recognize the need to keep African primates in Africa, specifically in the country of origin, when possible. At no time will PASA support the transfer of wild-born primates from Africa to Europe, North America, South America or Asia, except for situations that are judged to be in the best interests of the primates themselves at a species level and/or an individual welfare level.

3.6.1.2 Animal confiscation
PASA and its member sanctuaries are committed to all national and international law enforcement initiatives designed to uphold laws regarding the protection of primates in Africa, and support government efforts to halt illegal trade, conserve wildlife and wild spaces, and protect their natural heritage.

PASA and its member sanctuaries will collaborate with trade, customs, military and civil law enforcement agencies to halt the illegal trade in wildlife, and strongly urge that all confiscations include a thorough investigation and legal proceedings against offenders.
PASA member sanctuaries will endeavor to accept any African primate that is confiscated in Africa by law enforcement authorities and will provide permanent care and protection at the nearest available facility. Any African primate confiscated outside of Africa as a result of the illegal trade will be returned to its country of origin – provided a sanctuary exists – and if not, the nearest available facility within the region will be chosen, provided that the primate can be shown to have been taken illegally off the continent.

PASA and its member sanctuaries will regard in the highest priority confiscations that are accompanied by legal proceedings against offenders.

3.6.1.3 Housing and husbandry
PASA member sanctuaries will house all primates in a clean, comfortable, safe and enriching environment. The health and welfare of the primates are the highest priority of PASA member sanctuaries and will not be unnecessarily compromised. PASA member sanctuaries will keep current on the latest primate husbandry and continually grow in their ability to care for the African primates. Handling of primates will also been done with the utmost care and respect for the individual and the group. All procedures will be done with the minimum of stress and duress.

Where possible, PASA member sanctuaries will house all primates in normal social groupings. Isolation of individuals should only be done for health (psychological or physical) reasons. In the case of quarantine, whenever possible it should be encouraged to allow more than one individual to go through quarantine at the same time.

PASA member sanctuaries will strive to abide by PASA guidelines on captive management as outlined in this document.

PASA members that are committed to re-introduction programs must maintain captive populations in accordance with IUCN guidelines for re-introduction (see Section 4.5, p.26 for the full reference).

3.6.1.4 Animal health
PASA member sanctuaries agree to provide the best possible health care to resident captive wildlife. Where possible, PASA member sanctuaries will employ/contract a veterinarian with primate health and disease experience, or arrange to have an off-site veterinarian available in an advisory capacity.

PASA member sanctuaries will ensure that at least one staff member is trained in primate emergency veterinary procedures (by a suitably qualified veterinarian) and is on site at all times.

PASA member sanctuaries will strive to abide by the PASA veterinary guidelines on primate health care as outlined in this document and PASA Primate Healthcare Manual5,6.

PASA member sanctuaries will ensure that only primates that have cleared all quarantine/veterinary procedures are allowed to be moved to their permanent sanctuary/release site from which they may escape and/or come into contact with wild primates.

PASA member sanctuaries should ensure that all staff/volunteers/researchers/visitors that may have contact with the primates, their food, water or enclosures, have complete

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health screens as recommended by local Health Authorities and/or risk assessments of disease hazards, including vaccinations and annual TB testing.

3.6.1.5 Propagation
PASA member sanctuaries will not permit captive animals to reproduce unless they are part of a planned release program in accordance with IUCN/SSC Primate Specialist Group re-introduction guidelines, in which case careful deliberation is required to ensure that captive reproduction does not compromise the resources of the sanctuary or negatively impact the health and welfare of the other animals at the facility.

Reversible contraception should be used wherever possible, according to the requirements of the animal and the availability of expertise and equipment. PASA will make every effort to ensure that PASA member sanctuaries have access to the contraceptive equipment, devices and expertise necessary to maintain a captive population in a responsible manner.

PASA member sanctuaries accept that in some cases, permanent sterilization may be used, but careful deliberation of the long-term implications should be considered.

3.6.1.6 Euthanasia
Euthanasia is to cause humane and painless death in cases where it is determined to be in the best interest of the individual whose life is being ended.

The acceptable method of euthanasia is:
1. Sedation and analgesia prior to the administration of the euthanasia drug;
2. Administration of an intravenous drug that will simultaneously induce unconsciousness, cardiac arrest and clinical death, thereby not subjecting the animal to pain, distress, anxiety or apprehension.

By definition, euthanasia can only be applied for terminally ill or critically injured individuals for whom there is no reasonable hope of recovery as determined by the manager and the veterinarian of the sanctuary and any consulting medical experts.

3.6.2 Staff management policies

3.6.2.1 Occupational health and safety
An occupational health and safety program must be part of the overall primate care program at all PASA member sanctuaries. Programs will vary according to the nature of facilities, programs and environmental constraints, but must be consistent with regional, national and local regulations and be undertaken according to the following 4 key principles:

1. All persons within PASA member sanctuaries should be given the highest level of protection against risks to their health and safety that is reasonably practicable in the circumstances. Reasonably practicable means having implemented actions based on the following considerations:
   a) The likelihood of the hazard or risk occurring;
   b) The degree of harm that would result if the hazard or risk occurred;
   c) What the person concerned knows, or ought reasonably to know, about the hazard or risk and ways of eliminating or reducing the hazard or risk;
   d) The availability and suitability of ways to eliminate or reduce the hazard or risk; and
   e) The cost of eliminating or reducing the hazard or risk.
2. The sanctuary manager and others who control or manage matters that give rise to risks to health and safety are responsible for eliminating or reducing those risks.

3. Employers and managers should be proactive, to ensure health and safety at workplaces. This includes monitoring work environments, maintaining records and engaging people with appropriate skills and qualifications for tasks.

4. Employers, managers and employees should exchange information and ideas about hazards and controls.

PASA member sanctuaries should ensure that all staff/volunteers/researchers /visitors that may have contact with the primates have complete health screens, (the content of which to be confirmed sanctuary by sanctuary on a consent basis, but should include parasitology every 3 months, relevant vaccinations as required, annual TB checks and regular information updates for staff on diseases of concern (e.g., HIV).

3.6.2.2 Staff development
PASA member sanctuaries will ensure that all staff members are fully conversant in the concepts, principles and philosophies of the facility and PASA.

PASA member sanctuaries will provide in-house training for local staff and, where possible, access to additional ex-situ training.

Where possible, PASA member sanctuaries should build the capacity of local staff to take on increasing levels of long-term responsibilities in areas of sanctuary management, veterinary care, conservation education, government and community liaison, advocacy and other key disciplines.

Where possible, PASA member sanctuaries should always use national staff in preference to non-national personnel.

3.6.3 Local community and government relations
Where appropriate, PASA member sanctuaries will have in place a Memorandum of Understanding (MoU) or similar agreement with the national government, wildlife authority, or regional government that defines the sanctuary’s role in national conservation, placement of animals, and which describes roles, responsibilities and means of coordination between the sanctuary and national government.

PASA member sanctuaries should be cognizant of relevant local and national legislation and policy. Likewise PASA member sanctuaries should ensure they are aware of relevant international policy and conventions.

Where possible, PASA member sanctuaries will ensure that a significant proportion of staff are host country nationals. For long-term project sustainability, member sanctuaries will strive to develop national management capacity to reduce reliance on expatriate volunteers and management staff.

Where possible, PASA member sanctuaries will provide sustainable economic opportunities to local communities (such as employment, occasional labor, purchase of animal food, supplies and transportation.).

PASA member sanctuaries will strive to ensure that local communities are aware of the purpose of the facility/program, the need for conservation in general, the need to protect wild primates and their habitat, and respect their captive counterparts.
PASA member sanctuaries will ensure that official permission to be in operation is obtained from traditional, local and national government institutions and, where possible, have NGO not-for-profit status in the country of operation.

PASA member sanctuaries should strive to be aware of, and participate in long-term land-use planning with governments, companies and communities in their areas of operation. PASA member sanctuaries will advocate for the protection and conservation, as appropriate, of these areas, to avoid future conflicts.

PASA member sanctuaries should provide guidance on appropriate behaviour (cultural and political) to all international staff, volunteers and visitors recognizing that inappropriate behaviour by a non-national associated with a member sanctuary may jeopardize the sanctuary itself, and the spirit of conservation. Likewise national sanctuary staff should be held to a high conservation standard on and off duty, including not eating bushmeat and hunting.

3.6.4 Conservation
PASA member sanctuaries agree to promote conservation issues, and to adopt approaches that consider and integrate conservation concerns and strategies into their projects and programs. In doing so, PASA member sanctuaries should ask themselves if their actions:

- Will benefit the conservation of the species/sub-species concerned?
- Will benefit conservation locally?
- Will benefit conservation nationally?
- Have the support of government, NGOs, and the scientific community?
- Are feasible vis-à-vis local needs and exploitation patterns?

PASA member sanctuaries should collaborate with governmental agencies, local and international non-governmental organizations and local communities to prioritize and address conservation issues in their respective areas.

PASA member sanctuaries recognize that they play a vital role in preserving the future of Africa’s wildlife and wild spaces, but can only succeed through collaboration with a broad and inclusive range of partners.

PASA member sanctuaries should ensure that they are cognizant with relevant local, national and international legislation, policy and conventions.

3.6.4.1 Ecosystem approach
As the number of species at risk grows, implementing individual species management programs is becoming increasingly challenging. While this method will still be necessary for some species, PASA and its member sanctuaries should adopt approaches that benefit a range of species (both threatened and those which may yet become vulnerable).

The health of mammal populations such as primates can help in the assessment of overall biodiversity health. It is likely that the persistence of primate populations is contingent on large scale landscape structure.

Where PASA member sanctuaries are involved in the management of landscapes, consideration should be given to the protection of ecosystem services as a value-add strategy to support and complement existing conservation efforts based on species and their habitats. Doing so may offer a highly effective means of improving overall conservation success, both within and outside designated protected areas.

\[7\] For example, every range country in which PASA member sanctuaries operate is a signatory to the Convention on Biological Diversity (CBD)
3.6.4.2 Species approach
Where appropriate, PASA member sanctuaries should act as flagships for the conservation of endemic species as the sanctuary residents are highly visible emblems of important taxa in habitat areas (e.g., bonobos in DRC, verus chimpanzees in Sierra Leone and Guinea, and drills in Nigeria).

PASA member sanctuaries holding species or subspecies that are not endemic should provide long-term reversible contraceptives to discourage breeding. Where non-endemic taxa could potentially meet endemic taxa and interbreed sterilization should be employed.

3.6.4.3 Release and re-introduction
It is critical that PASA member sanctuaries incorporate systems for monitoring and reporting into their re-introduction programs to inform future re-introduction strategies.

Where appropriate PASA member sanctuaries should manage captive populations in such a way that release back into the wild may be possible in accordance with guidelines established by the IUCN/SSC Re-introduction Specialist Group. If release is being considered, the development of an appropriate program and site selection will need to be very carefully planned from the outset.

IUCN Guidelines will be abided by PASA member sanctuaries when release programs are undertaken. PASA member sanctuaries will involve relevant national, regional and local government agencies in the process of re-introduction, and will conduct any re-introduction program in an open and transparent manner.

Refer to Section 4.5 (p.26) for a list of reference material.

3.6.4.4 Conservation education and environmental communication
PASA recognizes that conservation education and environmental communication are central pillars to the effective long-term conservation of primates. Therefore, as possible PASA member sanctuaries should institute and maintain education and communication programs according to local politics, culture, sanctuary goals, audiences and resources that reflect local conservation needs and priorities. PASA will provide member sanctuaries with an education and communication manual to assist with program design and delivery as well as annual workshops that augment current skills of sanctuary staff members. However, PASA recognizes that member sanctuaries are often the best judge of the most effective education messages and communication strategies in their own milieu.

3.6.4.5 Law Enforcement
PASA member sanctuaries should where possible engage with law enforcement projects and programs which can act as a catalyst for activities in a previously neglected area, and offer potential significant conservation value. Sanctuaries can and do play a key role in identifying large-scale dealers in the primate trade and illegal wildlife products, and where possible provide evidence to support legal action. PASA member sanctuaries should also actively raise public awareness of the wildlife laws and the risks and penalties for breaking them.

The Last Great Ape (LAGA) organization has created a model for NGO-Government collaboration to facilitate wildlife law enforcement by focusing on the prosecution of major dealers, and combating corruption in the application of wildlife law in Africa. The LAGA experience and model is now being transferred throughout the sub-region. It is currently operating in three countries (Cameroon, Republic of Congo, CAR) and projected to reach five (Gabon, Chad) by mid 2010.
3.6.4.6 References
The IUCN/SSC Primate Specialist Group is developing a series of guidelines to address critical issues in great ape conservation, drawing on the expertise of PSG members to create a consensus of best practice for field conservationists. Based on the most current information, each publication is designed to give a clear, comprehensive overview of an issue (i.e., survey and monitoring of great ape populations, mitigation of human-wildlife conflict, etc), and to provide expert recommendations on how to address it. They are available for download from: http://www.primate-sg.org/best.practices.htm

3.6.5 Research
Knowledge of primate ecology is essential for their conservation and the management of habitat areas. Likewise knowledge of captive primate behaviour and health is essential for good welfare and captive management. PASA member sanctuaries should identify gaps in knowledge and where there is a lack of baseline data.

PASA disagrees with the use of non-human primates by pharmaceutical and research facilities. Therefore PASA member sanctuaries need to consider the implications of every type of research proposal very carefully and not assist with research that will in any way create the impression that a sanctuary is a surrogate laboratory.

PASA supports non-invasive scientific research into primate welfare, conservation ecology, behavior and cognition in accordance with the following criteria:

Criteria:
- Research involving wild primate populations must not disrupt their behavior and ecology. This excludes provisioning of food and no habituation of primates where risks from hunting exist now or may in the future;
- Medical research or biological sampling will be conducted only in response to sanctuary animal management needs, and samples should be taken only during routine examinations;
- All research involving biological sampling must have demonstrable health, conservation or genetic benefits to primate captive management and/or wild population conservation. Research cannot be exploratory nor justified on the grounds of human medical benefit or funding;
- PASA member sanctuaries must have an agreement with laboratories and/or researchers that ensure samples are used ethically (agreements may be PASA wide i.e., applicable to all sanctuary members, or arranged on an individual basis between sanctuaries and institutions). PASA member sanctuaries should ensure that the agreement specifies exactly what samples are to be used for and the laboratory/research institution must request permission to use samples for other tests (refer to Annex IV for the PASA Research Sample Request Form). No laboratory or researcher can infect /inject other animals experimentally with infectious agents derived from samples obtained from PASA member sanctuaries. The agreement should also guarantee the sanctuary the right of pre-publication editorial review and /or publication credit. Sanctuaries are advised to request co-authorship on publications and should make editorial inputs, bearing in mind the potential value of the study’s conclusions and how the study may reflect on the sanctuary and its host country;
- Research or training programs that encourage non-natural behaviors should be strictly limited and are only deemed acceptable when they benefit the health and captive management of the primates, and are not detrimental to the individual or social group. Acceptable research should involve minimal modification of animal and staff daily routines, and should potentially produce results that benefit the animals, the species, or facility;
- National staff, preferably caregivers of the animals concerned, should always be involved with in-house research activities to build their scientific and technical capacity.
3.6.6 Funding
PASA assumes no responsibility for the financial health of its member sanctuaries, and is not obligated to raise funds on behalf of individual sanctuaries or projects. If PASA does access funding for member sanctuaries or their projects, PASA may take an administration fee of up to 10% (if permissible) from the total amount for PASA operations.

3.6.7 Tourism
PASA has no official policy regarding the promotion of tourism at member sanctuaries. If PASA member sanctuaries decide to encourage tourist activities on a sanctuary-by-sanctuary basis, they should ensure that it is in the best interest of the primates and facility operations; does not compromise the work, goals or reputation of PASA as an organization; and that the general principles of eco-tourism are followed as per the guidelines presented throughout this manual.

3.6.8 Media
PASA has no official policy regarding the relationship between media and member sanctuaries. If PASA member sanctuaries decide to engage in print, radio, television, or film projects with media companies, PASA assumes no risk or responsibility. PASA will provide member sanctuaries with a protocol document that suggests fees, rights and protocols for any media agreements, and, if asked, will assist in negotiations (for more information refer to Annex V).

Any media project conducted at a PASA member sanctuary must fairly reflect the work of PASA and the other sanctuaries, and should be in the best interests of the primates and staff at the facility.

At no time should a media project at a PASA member sanctuary compromise the health, safety or welfare of the primates or the staff, and in no way should the primates be used to participate in artificial, unnatural or dangerous acts.

3.6.9 Green
PASA recognizes that its work, and the work of its member sanctuaries, may have a direct or indirect impact on the local and/or regional environment. PASA is therefore committed to reducing any harm that this may cause on the environment and, as a consortium of conservation focused organizations, PASA promotes the understanding of sustainability and environmental stewardship.

PASA’s Green Policy respects nature and the natural balance of life through codes of practice on waste and environment protection. We focus on:
- Reducing waste;
- Reusing materials at every opportunity;
- Repair rather than throw away where we can; and
- Recycle.

As our green culture becomes more established and embedded, we aim to:
- Encourage our members and their staff to be responsible, corporate green citizens;
- Encourage sanctuaries to develop their own policies and guidelines;
- Engage governments in conservation action;
- Use water and energies sparingly, and where possible, use renewable energies;
- Consider environmental impacts in our purchasing;
- Endeavour to work with partner organizations that share our green values; and
- Reduce the need for transport and its impact on the environment.
PART 4: MINIMUM STANDARDS

4.1 Overview of PASA minimum standards
In addition to adherence to PASA’s Codes of Conduct, Operational Philosophy, Principles and Policies, PASA membership also entails compliance to Minimum Standards in sanctuary management and operations, staff management and development, captive primate welfare and husbandry including breeding, veterinary care, re-introduction and conservation education. Aspiring sanctuary applicants should read this section carefully to be informed of the Minimum Standards required to become a sanctuary member. The standards will be regularly updated to incorporate innovative methods and evolving best practice and science, and existing sanctuary members are advised to regularly consult this document to ensure that they remain compliant and maintain a high level of professionalism.

PASA recognizes that many member sanctuaries care for non-primate species as part of their overall commitment to animal welfare, conservation, ecological awareness and law enforcement. Each species must be cared for in an appropriate manner that guarantees the health, safety and emotional well-being of the animal in question, and as such the majority of the Minimum Standards and indeed Best Practice Guidelines are sufficiently generic to apply to all species. However, PASA urges all sanctuaries to supplement the information contained within by seeking appropriate species-specific expertise and guidance.

PASA has embedded the most widely used, current definition for animal welfare, the ‘Five Freedoms for Animal Welfare’ throughout this document and they are integral to the Minimum Standards. This approach was first formulated by the Farm Animal Welfare Council, a body set up by the UK government, in response to the Agriculture (Miscellaneous Provisions) Act of 1968, to advise them on issues relating to farm animal welfare and to develop new standards for agricultural practice. However, the same approach is as equally applicable to non-domesticated species and other forms of captive management since the Five Freedoms define the needs of animals which should be met under all circumstances. They are:

- Freedom from hunger and thirst;
- Freedom from thermal and physical discomfort;
- Freedom from pain, injury and disease;
- Freedom from fear and distress; and
- Freedom to express normal behavior.

4.2 Sanctuary management and general operations

PASA management and operations goal:
All PASA sanctuaries must ensure that the management of their facility is conducted in a manner that provides the best possible health and welfare standards for the individuals in their care, and ensuring that long-term management strategies are adopted and implemented.

To achieve these goals each PASA sanctuary is expected to:

- Register as a legal entity within the country they are operating, when possible and applicable;
- Have a formal agreement with the relevant government authorities within the country they are operating;
- Strive to ensure long-term and secure agreements for land tenure/ownership for the sanctuary site (in accordance with national regulations and legislation);
Be compliant with national and international (CITES, IATA) regulations when transporting samples and live animals\(^8\).

- Ensure that all primates in their care have appropriate official documentation from the relevant government authorities to verify their legal status at the sanctuary;
- Have an organizational structure such that if any staff member was incapacitated or left, the sanctuary would continue in their absence;
- Maintain a national staffing level policy that ensures adequate care for the primates in their sanctuaries, that includes:
  - The ability to clean each facility and enclosure on a daily basis;
  - Provide food and water several times a day;
  - Ensure the safety of staff when moving/transferring primates from one area or facility to another;
  - Carry out general cleaning and maintenance work as needed; and
  - Provide veterinary emergency care within appropriate time limits to ensure the wellbeing of all primates in their care.

- Ensure all staff members are properly trained to care and manage captive primates in a manner that reduces risks of potential threats to the staff welfare such as disease transmission and injuries from those primates considered dangerous, which include most individuals that have the ability to inflict a bite wound that can break the skin (i.e., juveniles, adolescents and adults);
- Maintain appropriate records not only of the primates in their care, but also of personnel, finances, protocols and procedures; and
- Strive to ensure secure financial support for basic annual operations, which ensures the health and welfare of all primates in their care.

### 4.3 Captive primate management

**PASA captive primate management goal:**
Develop and implement specialized care and housing that takes into account primate physical, physiological, psychological and social needs.

To achieve these goals each PASA sanctuary is expected to:

- Have appropriate facilities to ensure the wellbeing of the primates, as well as the safety of staff, contractors and visitors to the sanctuary;
- Provide facilities for quarantining individuals that are either new arrivals or suspected to have infectious disease. These facilities should be at a minimum of 20m from any other facility;
- Ensure that all facilities, inclusive of quarantine or short-term temporary housing, provide a complex and stimulating environment to promote normal behavior as expressed by that particular species and prevent boredom;
- Ensure that all primates in their care are not kept in isolation unless necessary for quarantine or for treatment/recovery purposes;
- Have at least one fully employed staff member who has relevant experience/training in primate captive management, especially in the species being cared for by their sanctuary;
- Ensure all hard-surfaces in enclosures or holding facilities, such as walls, floors and furniture are washed at least once a day or as frequently as necessary to keep them free from contamination;
- Clean benches, shelves, ropes and climbing structures frequently enough to prevent the accumulation of fecal matter and urine;
- Daily spot-clean of soil or other natural substrates to remove organic waste;

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- Thoroughly rinse watering devices, feeding equipment and other metal or plastic equipment, if disinfected after cleaning;
- Provide access to primates to dry areas during and after the cleaning process;
- Ensure all enclosures allow access to an area such as a nest box, raceway/tunnel (connection between enclosure and holding area) or night den, suitable for the physical isolation of individuals so that animals can be restricted for close examination and veterinary treatment;
- Ensure that all transfers of adult apes and monkeys from one place to another are conducted in such a manner that caregivers and primates are not sharing common space. Caregivers should not have to enter a primate raceway in order to access rooms in holding facilities or enclosures;
- Consider that all infant primates require physical contact with their mother or surrogate to ensure normal psychological and social development. All sanctuaries must ensure that appropriate contact protocols (such as a human caregiver in the case of a great ape or in some cases stuffed toys for certain monkey species are acceptable) are in place when caring for infant primates;
- Maintain an enrichment program that is suitable to the species they are caring for and the type of conditions they live in. In most cases, social enrichment will be addressed once integration into groups is completed, depending on the sanctuary and the stage at which the primate is at in the sanctuary. Environmental enrichment will be required if the facilities cannot provide a full range of opportunities as experienced in the wild. This may be less of an issue with large open topped enclosures of a natural setting, i.e., forest areas. The main area where enrichment is important is when the primate first arrives at the sanctuary and where individuals or groups may have to spend time in holding areas. In these cases, a well thought out and regularly managed enrichment program is essential; and
- Apply minimum facility sizes as follows:

  For **indoor enclosures**: Each room should be large enough to contain four individuals together overnight i.e., the smallest rooms should be no less than:
  - Great apes: 3m(H) x 5m(W) x 4m(L) (60m$^3$)
  - Baboons: 2m(H) x 3m(W) x 4m(L) (24m$^3$)
  - Monkeys: 2m(H) x 2m(W) x 2m(L) (8m$^3$)

  For **outdoor areas/enclosures**:
  - Great apes: 250m$^2$ per individual (no less than 1000m$^2$)
  - Baboons: 60m$^2$ per individual (no less than 250m$^2$)
  - Monkeys: 30m$^2$ per individual (no less than 120 m$^2$)

### 4.4 Veterinary and human health and welfare

**PASA veterinary and human welfare goals:**
1. Prevent disease entering the sanctuary;
2. Maintain health of animals within the sanctuary; and
3. Prevent dissemination of disease to other institutions/populations.

To achieve these goals PASA members must secure the services of a veterinarian(s)\(^9\). The veterinarian(s) must possess particular knowledge in the field of animal health as it applies to the species under his or her care.

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\(^9\) Whilst each sanctuary would ideally secure the resources to employ an experienced full-time veterinarian, it is acknowledged that this may not be presently possible. However, access to remote and/or consultancy services of a suitably qualified veterinarian should be within the remit of all PASA accredited sanctuaries.
Members must provide evidence of a preventative health program for the sanctuary and any release program. This program will highlight diseases of concern and:

- Control and mitigate effects of endemic disease by disease surveillance and biosecurity;
- Minimize risk of imported disease by quarantine and pre import testing protocols;
- Prepare for exotic disease importation by effective disease contingency planning.

The role of the veterinarian/veterinarian team, in consultation with sanctuary management, is to establish and maintain this health program which must include the following components:

- Veterinary input into enclosure design to minimize disease spread and allow effective veterinary intervention as appropriate;
- Detailed animal records in a transferable format;
- A nutritional program to minimize health and welfare issues;
- A safe and effective program for the control of pests;
- Quarantine – newly arrived animals to be kept isolated as long as is necessary to ensure proper examination and disease screening before introduction to other animals at the sanctuary;
- An opportunistic disease screening program – routine examinations, including parasite checks and TB tests, and preventative medicine including vaccination and endocrinological studies to be conducted at such intervals as recommended by the veterinarian/veterinarian team. All samples taken for further investigation must be documented, stored and shipped appropriately\(^{10}\). This program must include a documented post mortem routine:
  - Dead animals to be handled in a way which avoids the risk of transmission of infection;
  - Post mortems to be carried out on all sanctuary animal deaths by the vet or a pathologist with relevant experience and training;
  - Following post mortem examinations carcasses and organs to be removed swiftly and disposed of safely;
  - Samples taken from post mortems must be documented, stored and shipped appropriately.

- Disease contingency plans for high risk diseases must be in place.

Members must maintain proper standards of hygiene, both in respect of the personal hygiene of the staff and that of the animal enclosures, food storage and preparation rooms, and treatment rooms.

Hygiene Aims:

- To minimize disease spread between sanctuary animals and staff and visitors;
- To monitor health of staff and volunteers (by consent);
- To communicate closely with local health authorities regarding local health issues and recommendations for staff disease surveillance and medical requirements.

Members must give due attention to the health and safety of staff and visitors by:

- Making continued efforts to resolve any potential threats to the safety of staff or visitors, along with complying with all statutory requirements;
- Having a written safety and emergency plan that is regularly reviewed and updated;

4.5 Release and re-introduction

PASA re-introduction goal:
All re-introduction programs undertaken by a PASA sanctuary member take into consideration the welfare of the individual whilst safeguarding the conservation of the species.

PASA encourages, where possible and appropriate, PASA member sanctuaries to manage captive populations in such a way that release back into the wild may be possible. Clearly re-introduction is not always possible or a desired goal, but if a sanctuary has this objective from the onset then its development and management will comprise a very different set of considerations compared to those contemplating permanent captivity.

PASA has not developed its own set of Minimum Standards or Best Practice Guidelines for release and re-introduction. However, PASA has contributed to the development of the IUCN re-introduction guidelines for primates and apes, and as such regards them as principal text and fundamental to any project considering re-introduction. Sanctuaries that are PASA members, and considering re-introduction as a goal, are directed to the IUCN guidelines as best practice in the field. PASA’s Conservation Policy should also be used to inform program design and implementation (refer to Figure 2 on p.27 for a summary of steps and potential outcomes in the re-introduction process). PASA also urges sanctuaries considering re-introduction to communicate with those already engaged in the process of re-introducing to facilitate transfer of knowledge and best practice.

The following references are considered principal text if re-introduction is under consideration:


Figure 2: Steps and potential outcomes of the re-introduction process

**Steps in the Re-introduction Process**

- **Environmental Scan**
- **Site Assessment**
- **Site Preparation**
- **Site Protection**
- **Release**
- **Bio-monitoring**

**Intermediate Outcomes**

- Understanding of local social & political systems
- Understanding of landscape condition and threats
- Increased community education & awareness
- Reduced reliance on illegal hunting
- On-ground works done (revegetation)
- Increased law enforcement capacity
- Re-established or reinforced wild populations
- Established bio-monitoring programs
- Increased local sampling & analytical capacity

**Outcomes**

- Improved species conservation status
- Increased understanding of reintroduction biology
- Improved species conservation status
- Increased understanding of reintroduction biology
- Increased species conservation status
- Increased understanding of reintroduction biology

**Protected and enhanced biodiversity and ecosystem services**

- Contribution to long-term goal

- Inputs to decision-making and policy processes
- Pathway to land stewardship and ecosystem health
- Pathway to species conservation

**Key**

- Activity Areas
- Capacity Building Elements
- Biophysical Elements
4.6 Conservation education, environmental communication and advocacy

PASA education goals:
1. To promote primate conservation;
2. To influence the long-term attitudes and behaviors of people to encourage the protection of species and their habitat; and
3. To create on-going public support, influence policy makers and foster commitment to protecting primates and their habitats.

To achieve these goals *conservation education and environmental communication* must be key elements in the mission of the sanctuary and be accompanied by a written education and communication policy:

- The words “education” and “communication” should be used in the sanctuary mission statement or must be implied or embodied in that statement;
- The policy should identify specific components of the program and set out the overall methods by which these components are accomplished;
- The education/communication department should be under the direction of a paid staff person who is trained or has experience in educational and communication programming and whenever possible held by a national of the country where the sanctuary exists. In smaller sanctuaries, this role might be combined with other functions and be carried out by personnel such as the Director or a Senior Keeper. However, staff involved must be familiar with education and communication theory and practice and ideally have some formal or informal training through conferences and PASA workshops;
- All sanctuaries must strive to train and retain nationals in the positions of education and communication recognizing that these areas are culturally embedded and sensitive;
- Education and communication personnel should be involved in the development of all exhibits, graphics, media, curriculum and interpretation, as well as all structured programs for the visiting public and outreach programs for communities; and
- The sanctuary must demonstrate that it is carrying out its education policy, by reference to specific projects, figures of attendance, evaluation procedures and research.

Sanctuaries must have a written education and communication plan and the appropriate staff to administer the plans:

- Education and communication plans should include a vision/mission statement, as well as strategic goals and measurable objectives, target audiences, key conservation messages, resources and tactics, and evaluation;
- Plans should be created with wide consultation and include input from sanctuary staff, local communities and partner organizations; and
- The plans should be written as living documents that can be updated and altered regularly as an iterative process via evaluation.

Sanctuaries should have a thorough understanding of the needs of its different target audiences:

- A sanctuary may not be able to reach all audiences equally, but a thoughtful approach to audience selection should be evident along with strategic program development;
- Programming should include primate conservation issues such as habitat management, pet and bushmeat trade, species-specific information such as natural history, social structures and unique attributes, the role of sanctuaries as
centers for conservation, information on the specific sanctuary and about PASA, as well as specific ways that the audience can contribute to the conservation of species;

- Education and communication should be an integral part of every sanctuary visit including panels, exhibits and interpretation talks. As well, where possible, sanctuaries should participate in *in-situ* education and communication programs;
- Programming should clearly address all learning styles; and
- Community engagement is the central pillar to successful education and communication programs. Programs must be culturally relevant and be designed in consultation with community members.

Where possible, sanctuaries should partner with local education groups:

- Sanctuaries should encourage active, ongoing collaborative partnerships with community groups, other informal education institutions, school districts, institutes of higher learning, other conservation organizations, local and national governmental agencies, and other organizations and individuals that can contribute to the expansion of its educational and communication dimension and accomplishment of its mission; and
- All sanctuaries must have an on-going relationship with the local authorities and governments of the country they reside in.

All education and communication programs should be evaluated on a regular basis for effectiveness, content, and updated with current information. Results from evaluations should be used to improve the existing programs and to create new programs:

- Sanctuaries should institute up-front, formative and summative evaluation into their education and communication programs.
PART 5: BEST PRACTICE GUIDELINES

Previous sections have clearly identified Minimum Standards of compliance required to become and maintain PASA sanctuary membership. However, it is assumed that PASA sanctuary members will continually strive towards even higher standards. The following section provides direction in key areas to guide PASA sanctuary members to even higher levels of professionalism. PASA will strive to continually build capacity in its member sanctuaries to facilitate development and implementation of best practice described throughout this section.

5.1 Sanctuary management and general operations

All PASA member sanctuaries should provide an appropriate organogram for staff and partners to facilitate understanding of structure and reporting mechanisms. This is especially important for sanctuaries that utilize volunteers on a regular basis.

Most PASA member sanctuaries will be structured in such a way as to have a Manager/Director and Senior Manager who is responsible for general operations (the day-to-day running of the sanctuary). Subsequently, most sanctuaries will be divided into two key areas: maintenance and caregivers. Some sanctuaries will have either a permanent veterinarian on staff or a veterinary technician. This position is often higher in the organizational structure than caregivers and reports directly to the Manager (or is the Manager).

It is recommended where the sanctuary has a large staff of caregivers (10 or more individuals) that smaller teams or units are created to streamline management. Most management protocols recommend between 5-10 individuals per unit/team based on the assumption that one manager can only oversee 10 people effectively. Management training is recommended to build capacity of national staff who may have never received training in supervisory and training skills.

5.1.1 Administrative requirements

Maintenance of records on personnel, fixed assets, operational procedures, financial management and animal management, including veterinary procedures is extremely important to ensure successive planning, auditing of the sanctuary and animal care. Each sanctuary should adhere to basic administrative record keeping, and these should include but not be limited to the following:

General administration:
- File copy of all external correspondence;
- File of all memos to staff and other internal correspondence;
- File copy of all trustee/institutional meetings;
- Trust deed/NGO registration;
- Lease agreements;
- Visitor record numbers;
- Release forms and medical records from visitors/volunteers having contact with primates;
- Electronic files of all email correspondence;
- Backup file copies of all computers on a weekly basis (save to server, disks, external hard drives etc); and
- Records of all fixed assets, including an inventory.

Financial management:
- Duplicate record of all purchases and transactions;
- Bank reconciliations;
- List of all major suppliers;
- Payroll slips of all employees;
- Copies of all credit advice notes;
**Copies of all bank statements;**
**Copies of all visitor admission slips, if applicable; and**
**Inventory of receipt books, visitor admission books etc.**

**Animal management records:**
- Daily diaries on individuals;
- Quarterly stories/reports for sponsorship programs if applicable;
- Receipt for individual animals from the authorities;
- Any CITES permit of those transferred internationally;
- Individual veterinary/health procedures recorded data; and
- Up-to-date photographic record of individuals.

**Personnel files:**
- Contracts for personnel;
- Health records of personnel;
- Personal details of personnel;
- Disciplinary letters file;
- Employees Handbook;
- Annually updated photos of all staff members;
- Volunteer and researcher manual;
- Volunteer and researcher release form; and
- Volunteer and researcher personal information and medical records.

**Management of sanctuary:**
- Occupational Health and Safety Manual;
- Incident reports;
- Minutes of weekly meetings with sanctuary personnel;
- Minutes of all other meetings, such as community meetings;
- Financial accountabilities of all transactions;
- Staff rosters;
- Daily diary;
- Veterinary/Health Care Manual; and
- Up to date photographic record of the sanctuary.

### 5.1.2 Key sanctuary management manuals/protocols

#### 5.1.2.1 Standard operation procedures manual
The Standard Operating Procedures Manual is a set of protocols and procedures that are to be maintained and implemented by all employees. The manual assists employees in executing their duties in a standardized manner as per the policies of the organization. The manual should include general daily routines, rules, protocols, emergency procedures and diets. The manual is a living document and should be updated on a regular basis, with no more than a 12 month interval between updates (recommended update every 6 months). All updated copies of the manual must be signed by all employees working at the sanctuary.

#### 5.1.2.2 Occupational health and safety manual
The Occupational Health and Safety Manual (OH&S) is a set of guidelines for protective measures to be followed during routine procedures that may or may not involve direct contact between humans and primates.

The manual should aim to:
- Promote and maintain the highest degree of physical, mental and social well-being of employees;
- Prevent illness among employees caused by their working conditions;
• Protect employees from risk; and
• Adapt work to each person and their job.

Each sanctuary will have its own set of requirements with regards to OH & S standards and conditions, and should develop and implement such a manual within the first year of operation. Ideally, such manuals should have in place an OH & S committee that reviews the document. All senior members of staff at the sanctuary should be on this committee, as well as local experts (such as doctors/veterinarians).

5.1.2.3 Emergency protocols manual
All PASA member sanctuaries should implement a standard escape protocol as well as an emergency procedures manual in the event of likely disasters.

Types of emergency situations that procedures/policies should include but not limited to:

• Escape of dangerous primates;
• Evacuation of personnel due to war or civil unrest;
• Fire;
• Infectious disease outbreak in non human primates;
• Snake bite;
• Serious illness of staff or visitors to sanctuary; and
• Death of key personnel.

5.1.3 Staff development and training
All PASA member sanctuaries should have in-house training and facilitate access to external training opportunities for staff. Training in veterinary care, primate welfare, handling and general management of captive primates plus species-specific requirements is particularly pertinent. Well-trained, competent and motivated personnel can make an enormous difference in managing a captive population.

Sanctuary managers should ensure that people caring for primates are properly trained and exercise high standards of humane care and treatment.

PASA member sanctuaries should develop a comprehensive training program for new staff and establish a protocol for continuing education and training programs to inform staff of new developments or improved practices in primate care and welfare (e.g., housing, husbandry, handling, behavior, enrichment, health).

Programs should include some form of ongoing staff assessment to ensure that suitable standards and competence are attained and maintained.

Staff training and assessment of competence should be regularly reviewed as part of the animal care program. This will help ensure that any possible improvements in primate care are considered and implemented without undue delay.

All sanctuaries should develop an institutional policy governing the care and handling of non-human primates to minimize the transmission of zoonotic diseases between human caretakers and the primates in their care. All staff should be made aware of the human safety and health risks of working with non-human primates, their tissues or fluids. These risks vary depending on the species viral and health status and the extent of staff exposure. Staff training programs should include specific procedures for minimizing these risks.
5.2 Captive primate management

5.2.1 Introduction
Each PASA member sanctuary is unique and provides a variety of captive environments for non-human primates. The types of housing vary widely depending on the local situation; the terrain, materials available for construction, location of the sanctuaries, and whether re-introduction is a long-term goal. There are, however, basic requirements needed to ensure the health and safety of the primates in the sanctuary, the personnel caring for them, and any visitors that may come to the sanctuary. It is the responsibility of the sanctuary manager/management team to ensure all facilities are constructed and maintained in a manner that ensures safety to all. PASA recommends the following as Best Practice for primate housing and husbandry.

5.2.2 Captive primate housing and husbandry

5.2.2.1 Facility design
Designing facilities for primates is a complex process, particularly in a sanctuary environment. Due to the conditions of individual animals received in the sanctuaries, (frequently arriving with physical and psychological trauma) many of the features of facilities are geared towards a higher level of contact between the caregivers and non-human primates than normally seen in other captive settings such as zoos and laboratories. The rationale for this is that such individuals will require more one-to-one care than in the other two settings, and furthermore it reflects differences in the philosophy of sanctuary management from other captive scenarios. As per the mission of PASA member sanctuaries (release to a wild state where possible), the success of rehabilitation of individuals is determined by the close and safe working relationship between sanctuary personnel and the primates in their care.

The main purpose of containment is to ensure the safety of the primates, and the humans caring for them. Ensuring that species-specific behaviour is maintained during containment is essential for minimizing stress to the individual animal, providing a good quality of life, and essential to facilitate success of release programs.

The availability and cost of materials will need to be taken into consideration when designing facilities. Where possible durable materials that will allow for longevity of the facilities without high maintainence are recommended.

Recommended materials used for containment:

Walls: Bricks or block work and bars or welded mesh panels
Floors: Concrete (satin finish) and/or tiles
Ceilings: Bars or welded mesh or concrete
Roof: Concrete, iron sheets or tiles

Bricks: Cement blocks or ordinary bricks (double bricked) can be used (render or plaster on the inside to facilitate easy cleaning). High gloss paint that is waterproof is highly recommended if a satin finish render is not possible.

Concrete: Anywhere that primates have access to concrete walls or floors, a satin finish protocol should be maintained.

Bars: Generally not acceptable with monkeys, though good with ape species, especially adults. For apes, bars should be no less than 12mm thick, with spacing between bars no more than 8cm wide, and 1m in length. For monkeys, a much narrower spacing would be required, and no wider than the diameter of the head of the smallest primate.
**Welded mesh:** Gauge of wire should be no less than 5mm in thickness for apes. For most monkey species, 3mm thickness is sufficient. Openings between wires should be no more than 5cm x 8cm.

**Chainlink:** Chainlink mesh can be used for most monkey species although it is not suitable for apes. Care should be taken to ensure that the point of fixture to either timber poles or steel poles (angle iron or hollow section) is well fastened and there are no sharp edges/ends that could cause injury to either the monkeys or the caregivers. The size of the opening in chain link is important, and must be small enough to prevent young infants from passing through (generally about 55mm).

**Electrical fencing:**
- **Fence height:** The minimum height of fencing should ideally be 2.5m, although some fences are can be as high as 3.7m where individuals are known to use branches as ladders.
- **Posts:** Generally made from eucalyptus that has been treated against termites. Metal posts can also be used although insulation problems may be a consideration.
- **Wire:** For apes, 20 gauge high tension wire is recommended. Polywire which is linked together with non-electric rope can work with some monkey species. Spacing between wires should be no more than 10cm.
- **Power source:** Solar energy is most the commonly used and reliable method. An energiser for power to the fence is needed. Size of energiser depends of the size of enclosures.

**Keeper doors:** All primate holding room doors should open into a secure airlock corridor, not open directly to the outside. Keeper doors should open inwards. For apes, two locking mechanisms used on each door are recommended. Padlocks should be used on every door. Padlocks should not be used as the only locking mechanism, bolts should be used as the primary containment device, with the padlock as the final containment.

The main door leading into the building should be a double door or wide enough to allow a transport crate or wheel barrow to pass easily.

**Padlocks:** Padlocks should be customised to work on one locking system per building or for all holding facilities. This will reduce risk in emergency situations if caregivers only need one key to open doors. It is advised that all shanks of the padlocks that are exposed to the weather be made of brass, or in high risk areas, of reinforced steel. Training in padlock maintenance is advised to ensure longevity and security of the locks.

**Internal walls:** Solid walls made from bricks or concrete need to have a smooth finish to allow for easy cleaning. Paint can be used, either high gloss or water resistant if available, otherwise, a satin finish render with oxide pigmentation will suffice. Tiles can also be used if available and affordable.

**Floors:** Should always slope towards the drains (drains should be external to any animal access point). Floors for any indoor housing should always be a hard, smooth surface that is easy to clean. Tiles can be used on floors if they are available and affordable (care should be taken with grout spacing and use of antibacterial grout), otherwise, a satin finish concrete floor is acceptable.
**Drains:** Should be external to primate access points. Troughs should be sufficiently deep to avoid flooding and spillage. Catchment baskets should be installed before waste enters the soak pit sump to avoid debris entering the soak pit.

**Caregiver corridors:** For apes, internal corridors utilising mesh or bars should be no less than 2m wide. Width can be less for many monkey species if the mesh is small enough to prevent monkeys reaching through. If walls are solid, 1.5m can be used. In places where bars are used on both sides of the corridor, and primates have full reaching ability, 3m wide corridors should be installed.

**Primate access doors:** In most cases, sliding doors should be used above guillotine doors. Sliding doors should have a roller mechanism rather than just sliding the top and bottom of the doors through a trough system. Roller mechanisms can prevent rusting, facilitate movement, and reduce risk of back injury to staff. They should be made of steel and not plastic. There should be enough sliding doors in an area to provide a flee route (circle route).

**Raceways:** Raceways (tunnels) can be used to transfer primates from one side of a building to another, or from one building/enclosure to another. Raceways in buildings should be made of the same materials as general containment. The height of the raceways is species dependent. In general the height should be no less than top of head to ground when primate is standing in normal quadrapedal position. In other words, primates should not have to crouch down or crawl to pass through the raceway. Use of electric fencing as external raceways can also be used. Raceways should always be kept closed to prevent non-intended integration between individuals or groups.

**Watering mechanisms:** All rooms should have water access. Use of bowls is not advisable as it is more difficult to maintain a good level of hygiene. Whilst water is offered by hand in some sanctuaries, particularly those that do not have running water, this is not an ideal practice for primates permanently housed in the holding facilities. The use of drinking nipples often referred to as ‘pig nipples’ (see image to left) is affordable and easy to install. However, there are exceptions and each sanctuary must adapt to its particular situational challenges.

**Furniture:** All rooms should provide sleep space for all primates off the floor. Depending on the species these can be sleeping benches, platforms, hammocks, rope, bamboo, nest boxes or branches. Attachment points for hammocks and rope should be installed in all rooms during construction. Platforms should be wide enough that the primates can sleep comfortably with several individuals together. Platforms and benches should be arranged at varying heights to allow primates to avoid eye contact with co-inhabitants. Tyres can also be used in rooms that are sufficiently large enough for the tyre to swing around without hitting the walls. Tyres should be strung with chain and not rope. If using rope, care must be taken to avoid accidental hanging due to frayed rope. Rope ends must be secure (melting the ends of the rope can prevent unravelling). When available, marine rope is ideal.

**Enrichment Devices:** Rooms used for daytime or prolonged containment should have/utilize enrichment devices.

**5.2.2.2 Holding/satellite facilities**
The design of indoor or holding facilities is characterized by three dimensional containment. In most cases, sanctuaries will be situated in the equatorial zone of Africa, where climate control will not be necessary, other than to ensure proper shelter from
wind, rain and sun. Sanctuaries located outside the equatorial zone of Africa will need to consider temperature control when it goes below 18°C. Care must be taken when choosing heating apparatus to eliminate the possibility of fire in the facility (nesting materials such as hay or shredded paper are highly flammable).

- Where possible, all holding facilities should be no less than 3m in height (preferably 4m for apes). Adjoining rooms that vary in size should facilitate separation of individuals into smaller compatible parties. Ideally all rooms should have two access doors for primates to enter/exit from, doors on different walls, and preferably at different heights. This allows for easy circulation of individuals and provides escape routes for submissive individuals in times of aggression or integration;
- Caregivers should have a clear view of all rooms and doors when opening doors or operating raceways for primates; avoidance of blind spots is highly recommended. This should be a consideration at the design stage;
- Where primates are housed indoors, there should be sufficient ventilation to provide ample fresh air and prevent accumulation of odor and noxious gases;
- Humidity must be kept at levels appropriate to the species and for health to be maintained;
- Natural lighting of indoor facilities should be sufficient to view the primate without problem. While it is recommended to have lighting for night time use, it is normally not possible, and in such cases reliable high powered torches are recommended; and
- Toys and devices should not be able to cause harm to other primates, personnel or be used to damage the integrity of the containment facility.

5.2.2.3 Enclosures
- Enclosures may be open, semi-enclosed, totally enclosed, or consist of islands surrounded by water;
- Enclosures must be well constructed and maintained in good repair. Particular attention must be given to eliminating sharp edges and broken wires. If using electric fencing as the primary containment barrier, the fence must be of sufficient height to prevent escape, the poles and wire maintained and checked on a regular basis, and have a reliable power source with a backup system in place;
- Sufficient shelter must be provided to allow protection from wind, rain and extremes in temperature. Access to both shade and sunlight must be provided;
- Sufficient space must be provided, both horizontally and vertically, to enable the animals to take exercise, to protect individuals from undue dominance or conflict and to provide for their social and behavioral needs. Sufficient exhibit furniture must be provided, and this will vary in design and type depending on whether the primate species is arboreal, semi-arboreal or terrestrial;
- Where more than one species is housed in the same enclosure, the enclosure size must meet the cumulative space and furniture requirements for both species; and
- Substrates used must drain well and be managed to avoid disease transmission.

5.2.2.4 Temporary holding facilities
In some cases, the need for temporary holding facilities may arise. For example, in the case of a newly arrived adult primate awaiting full integration, or when an individual is no longer accepted in group and is undergoing integration into another group.

In these cases, if the quarantine facility is not in use, it can serve this purpose. If this is not possible and containment is only for a short period of time, former transport containers can be used (for apes only). For monkey species, it is advisable to have one or two transportable cages (can be lifted by hand and moved to the desired location) available for such situations. Cages that have a steel framework with wire mesh are suitable, but they should be no smaller than the minimum dimensions given in the Minimum Standards Section 4.3 (p.24).
5.2.2.5 Nursery facilities
Requirements for infant primates are based on age and individual needs. Infants under 12 months of age require a 24hr caregiver and will spend most of the time clinging to their surrogate mother. This surrogate mother would ideally be an older con-specific or a human caregiver, but in some primate species the use of stuffed toys and hot water bottles wrapped in cloth can work with very young infants. Infants should be housed in a safe environment, that also allows for climbing, exploration and play with or without other infants.

Whether a PASA member sanctuary regularly receives many infants will determine the need for a separate facility that acts as a nursery. Quarantine and veterinary treatment facilities can often act as nursery facilities.

The main features required for a nursery are:
- Kitchen facilities (sink, stove, refrigerator, work benches) that are easy to access and keep clean;
- Indoor facilities that are easy to maintain and clean;
- Easy access to bathroom (shower and toilet) for staff and the disposal of faecal and urine waste of infant primates;
- Outdoor play area that is safe and not accessible by older individuals of the same and/or other species; and
- Sleeping area that is easy to clean and maintain for infants and caregivers.

Key areas for consideration are a high level of hygiene (ease of waste disposal and food preparation) and security. Once quarantine is over, provision of a same-species surrogate mother is highly recommended.

5.2.2.6 Quarantine facilities
The primary goal of quarantine facilities is to ensure physical and spatial separation (minimum 20m) from new arrivals or individuals suspected of harboring an infectious disease.

5.2.2.6.1 Carrying Capacity
Separate quarantine facilities are a must for all sanctuaries. The size of the facility and number of rooms needed is dependent on the average acquisition rate of the sanctuary. In most circumstances, three interconnecting holding rooms will permit the quarantine of up to six infants or juveniles or three adults for the normal 90 day quarantine period. In one year such an arrangement could accommodate up to 18 infants/juveniles and nine adults. As already stated, quarantine facilities may double as nurseries if acquisition rates are low.

5.2.2.6.2 Facility Design
Quarantine facilities are usually composed of two physically separate areas:

(a) Staff area
Staff area requirements:
- Storage space for cleaning equipment;
- Rest room and a locker room with shower facilities for staff;
- A single or double corridor system; and
- A footbath (containing an effective disinfectant to be used prior to entering the quarantine facility).
(b) Animal holding areas
Animal holding area requirements:

- The facility must ideally meet the requirements for holding an adult great ape or monkey, (depending on sanctuary species);
- For adult great apes, no less than two adjoining rooms of 3m(W) x 5m(L) x 3m(H) is recommended (45m$^3$); and
- For adult monkeys, no less than two adjoining rooms together comprising 2m(W) x 2m(L) x 2m(H) (8m$^3$).

Ante-rooms (enclosed space with double door system) should be attached to holding rooms.

Indoor area: Complete shelter from the elements should be provided with adequate housing.

Substrate and drainage: Floors, walls, and ceiling should be impervious to moisture to facilitate cleaning and disinfecting. The drainage system must be totally separate from regular holding areas.

Outdoor area: Should be connected to the indoor area but physically separated by solid walls (ideally minimum 5m). The ceiling should be meshed and not solid, with appropriate cage furniture to allow for three dimensional use of the space.

Support facilities: There should be an area for carcass disposal. A separate garbage pit should be provided to avoid contaminants getting into the general disposal pit.

5.2.2.7 Veterinary treatment/hospital facilities
All PASA member sanctuaries should aim to develop a separate veterinary treatment/hospital facility. If resources allow, all residents should ideally undergo an annual health check with a maximum space of two years between health checks if resources are limited, animal numbers are large, and there appears to be no health concerns. For example, if a PASA member sanctuary cares for 40 individuals, that equates to 40 regular health checks per year. Furthermore with an estimated five new arrivals to quarantine per year, with three health checks per each animal in quarantine, that equates to an additional 15 health checks per year. Therefore a PASA member sanctuary with 40 individuals can be expected to require the facilities of a veterinary unit for at least 60 days a year. If the resident number is 100, then the number of days would increase to 150 and this does not take into account routine laboratory examinations such as fecal floats, or emergency procedures.

Basic design requirements:
The veterinary facility should be located in close proximity to the holding areas of the resident population while still maintaining a quarantine distance of 20m. It is advisable that the resident captive population cannot see into the treatment room or observe the veterinarians at work. It is also important to ensure that a sedated individual should not be aroused by the noise of other primate residents. The facility needs access to running water and electricity (solar and generator for heavy machinery such as x-ray machines).
The main components are:

(a) Treatment/examination/operating room
This room should be large enough to allow two primates to be sedated and worked on at the same time, and be sufficiently spacious around the operating tables for up to 4-6 attendants in the room. It should be easy to clean and keep clean with plenty of work benches and storage, with good ventilation and lighting (natural and artificial).

(b) Laboratory
The laboratory should be a clean work place that has sinks and bench space for conducting procedures, and sufficient work space for the appropriate amount of testing apparatus.

(c) Office/records room
A workspace for prolonged sitting of 1-2 persons with access to power points and storage space for files/records.

(d) Other items to consider
Lockable cabinets for dangerous drugs, refrigerator for preserving specimens, and an area for conducting post-mortems (concrete slab with good drainage and access to water is acceptable as long as you can maintain fly control of the site).

5.2.3 Captive primate behavioral management

5.2.3.1 Nursery care for orphaned infants
Infant primate requirements are based on age, species and individual needs. A great ape infant under 12 months of age requires a 24hr caregiver and will spend most of its time clinging to its surrogate mother. The same can be said for most primate species, at least up to 6 months of age. However, individual determinations on staff responsibility and care-giving schedules must be decided by each PASA Sanctuary Member based on the resources available. With some species of monkey, placing infants together and the use of stuffed toys as surrogate mothers, can facilitate multiple infants to be cared for by 1-2 caregivers.

Infants should be maintained in a safe environment, that also provides for climbing, exploration and play with or without other infants. Each PASA member sanctuary should have a facility that provides caregivers with easy access to a food preparation area, cleaning equipment and bedroom facilities that allow them to sleep with their charges in as clean an environment as possible. In many cases, a separate bed or sleeping platform next to the caregivers bed will allow the caregiver to sleep comfortably, while still maintaining contact with the sleeping infant. All infants should be allowed to demand feed; setting of strict regimes for bottles is not advisable, as each individuals’ needs will differ. Each infant should have a primary caregiver, with other caregivers filling in when the primary caregiver is on rostered days off. Caregivers should encourage and ensure contact with conspecifics as soon as possible, but only when considered safe for the infant. Where it is possible to surrogate out the infant to an adult female con-specific it is advisable. For apes this can often be around 1-2 years, and for monkeys, much earlier. This is the most ideal handraising scenario, but if this is not possible, then a human surrogate will suffice.
5.2.3.2 Peer group housing
In PASA Member Sanctuaries as opposed to other captive facilities for primates, it is common to see groups of similar aged individuals. This normally happens in sanctuaries where the acquisition rate is high (2-5 new arrivals per year). For safety reasons individuals are often integrated into groups of similar age and size in order to reduce chances of attacks from older individuals. Whilst this is not a problem per se, if the sanctuary is considering releasing individuals back to the wild, then integration into a wider matrix of ages may be preferable. Furthermore, a group that has a broader and more natural age composition can facilitate captive management, for example, some individuals, particularly young alpha males, may require the discipline of an older male otherwise they can become very aggressive in peer groups. Caregivers and managers should be careful to observe such interactions within peer groups. Caregivers can act as an adult primate in disciplinary situations although this can be problematic with monkeys. Introducing a common threat to conflict situations such as an artificial snake can help to diffuse aggression by re-focusing attention to the threat. Caregivers should regularly observe interactions between group members to ensure younger or smaller individuals are not being bullied. With apes, caregivers who have hand-raised individuals may successfully use vocal commands from the outside of the enclosure to control bullies. If possible, integration of adult females into younger groups can be a useful tool to controlling bullying older males.

5.2.3.3 Integration procedures
Non-human primates should be housed in social groupings at all times. The only exception is during quarantine or if an individual is suspected to harbor an infectious disease.

Depending on the social structure of the primate species in the specific PASA Member Sanctuary, i.e., fission-fusion, single male groups, multi-male groups, female dominant societies, allowing the normal social organization of that species and ensuring individuals within the group are happy, will in all likelihood require periodic introduction or removal of individuals, depending on space etc. Introduction of unfamiliar individuals, particularly into adult groups or closed groups (groups that have not received a new member for a number of years) can be difficult and will likely elicit aggressive behavior towards the new individual. Care must be taken when integrating any new individual into a group, or integrating two groups together. The integration procedure should be well planned; all caregivers should be informed of what to do in case of an emergency, various scenarios of what could happen should be discussed between all relevant staff, and an assessment of the individual/s, group/s involved, should be conducted. No integration should be conducted in an open area where the staff has no control. A detailed record of the integration process should be kept on file and to facilitate future integrations. Debriefing is important to assess the success of the process and to discuss possible better methods/procedures to improve the integration process in the future.

PASA member sanctuaries are unique in the number of newcomers they receive and the age groups they support. Integration procedures are heavily dependant on type of housing and the individual animals concerned, but the following provides some guidance on how to integrate within different age groups. Furthermore, integration procedures may vary for re-introduction programs.

There is extensive literature on integration processes from other captive facilities and it is highly recommended that these papers are read by PASA sanctuary managers and veterinarians before carrying out integration, particularly if there is a lack of experience in this process (see list of references on p.46-48). Consultation with other PASA member sanctuaries is advisable. Importantly, inclusion of senior staff members from the facility in the process is important as they will have worked with the primates for many years, and will have extensive knowledge of the individual animal personalities.
Infants/juveniles
Infants and juveniles should only be integrated with similar aged and sized individuals or females that are known to be good with infants/juveniles. Any integration of an infant/juvenile should be conducted with the primary caregiver in attendance as it will help to reassure the individual that they are safe and also serve to reassure the other individuals; the caregiver can also control the interactions between the newcomer and the residents. It is best to introduce one or two residents with the newcomer first, and once the newcomer is relaxed, playing and confident with the resident individuals, other individuals can be added one at a time, giving 1-2 hours between adding new residents to the newcomer. Often the integration of an infant or juvenile to a peer group can happen in the space of 1-2 days. With monkeys, the use of adjacent satellites with a hole of the right size to allow the younger individual to move easily away from the adults but not for the adults to follow has been successful (a stuffed toy used as a surrogate mother can be left in the ‘safe haven’ to provide comfort).

If an infant or juvenile is being integrated into a mixed age group, then the process is much slower. The process should start with one or two adult females that are very stable and likely to adopt the infant/juvenile. Once a good relationship between the two is developed (can take several weeks to occur), the group can begin reforming around these individuals. The process should start with lowest-ranking females and proceed to the highest-ranking females. Once all females are successfully integrated with the infant/juvenile, the decision will need to be taken if and how to introduce the males. If the infant/juvenile is a female, it may be possible to proceed.

Behavioral observations of males towards the infant/juvenile through bars/mesh should be assessed. Observers should observe no aggressive behavior through bars or mesh before going to the next stage. Infant/juvenile should be confident with the adult males and display the correct submissive behavior. Integration should take place with the infant/juvenile being able to escape to a safe room where the adult males cannot enter.

All initial integrations should be conducted in the holding facilities and not in the enclosures. Doors with adjustable openings will allow infants/juveniles to move freely between the safe room and the room where the adults are. When taking the step to integrate adult males, it is recommended to start with the alpha male, leaving the subordinates last. Once the infant/juvenile is successfully integrated with the alpha male and all the females, it is possible to add subordinate males to the group, one at a time. This should be conducted over a period of weeks. It may take a week, or even up to a month between integrations.

In most cases, males will see unrelated younger males as a threat and will attack them. However, there are also examples where adult males are very tolerant of infant/juvenile males. If that situation exists then integration of these young males into a mixed age/multi-male group can proceed. If the situation is uncertain, integration should not be attempted until the infant/juvenile is of sufficient size/strength to defend itself, and this may mean waiting until they reach sexual maturity. This is not really an issue with monkey species and the integration process is overall less problematic.

Adolescents
As with infants/juveniles, it is recommended to integrate adolescents initially with similar aged or younger individuals, particularly if the adolescent has been isolated from other primates for most of its life. Adolescent males can be difficult to integrate. The same gradual process as for infants/juveniles should be adopted for this age group. If the individual that has limited social skills, allow an extended period of time with a smaller tolerant group before adding others, to allow the individual to learn the social skills to survive in a larger social unit.
**Adults**

Adults that have been isolated for years require special consideration and are discussed in more detail according to sex. When integrating adults that have been living in normal social setting either at the same PASA member sanctuary or from another sanctuary, then the process is similar to that of infants/juveniles/adolescents.

Integration should first be through bars or mesh, where the newcomer can see and interact with all the individuals of the group. Caregivers or researchers should pay close attention to those individuals in the group who demonstrate friendly behavior towards the newcomer. Grooming is a key indicator before proceeding to the next step. There should be no pre-planned timeframe for when to open the doors, only plan who will be the next individual added. All primates and humans need to be calm. Quietly opening a door, so that neither animal is aware it is open, can facilitate an easy and quiet interaction.

Staff on duty should have backup support if the integration goes badly and it is necessary to separate the individuals quickly. Fire extinguishers and cups of water are good if it is necessary to separate two individuals that are fighting; experienced caregivers must be on all doors leading into the rooms used during integration and the veterinarian should be on-duty and aware that the integrations are happening, in case emergency surgery is necessary. All integrations should be initiated early in the day to provide individuals with time to get to know each during the day with observers present at all times.

One option that has been successfully used to introduce adult guenons is to move all animals to another enclosure, one that is new to all monkeys involved.

**Adult females**

Adult females can sometimes be integrated directly with the alpha male (if she is in estrous, the alpha male is demonstrating friendly behavior, and she is presenting to him with confidence). Once they have been successfully integrated, they should not be separated again and the group should be reformed around these individuals. Adding to this grouping should be gradual, allowing the newcomer to develop a relationship with each new individual added to the group. If an aggressive interaction is observed and the new female is not receiving support from the alpha male or other individuals, further integration should be stopped. The newcomer needs to be given time to develop an ally base before more individuals from the original group are integrated with her. Males are more likely to be supportive of new females. It is necessary to ensure the new female has time to develop her relationship with the females, especially if the group is large (+15). The integration process can take between two months to two years to complete, often with many stops and starts.

**Adult males**

Adult males should be integrated with females first. Once this has been successfully achieved, it is possible to select one or two females, preferably high ranking, to be companions with the new male when integrating additional males. Always start with the alpha male and ensure that friendly behavior between the new and alpha male has occurred before adding additional males. Do not conduct the integration when females are in estrous as it can cause heightened aggression.

**5.2.3.4 Management of social communities**

Species-specific social structures will dictate the management of social communities in captivity. The nature of PASA member sanctuaries is that the sex ratio will be fairly equal in numbers, and on average most sanctuaries will see an equal number of males to females, particularly in groups of 20 or more individuals. This means the formation of not only multi-male groups, but also a high number of males in one group will be the norm for most sanctuaries. The social structure of species will dictate the ability to maintain
multi-male groups. Whilst it is possible with chimpanzees, bachelor groups of gorillas have had limited success. One male gorilla will assume the role of dominant male and depending on how the other males react will dictate if the group stays intact. It is commonplace in zoo situations that when a male gorilla becomes problematic he may be transferred to another facility. However, due to the limited number of African sanctuaries housing gorillas, this will not be an option, and therefore sanctuaries should avoid the establishment of bachelor gorilla groups.

Many monkey species have multi-male societies and if introduced when young should integrate and co-exist successfully. Other monkey species are strictly single male groups and as such, there may be a need to form all male groups if the sex ratio is fairly even. Managers should evaluate and research whether all male group formations are possible with the species in their care if there is no option to house the males in normal groups.

It should also be noted and expected that sometimes well-formed groups of monkey species can collapse for unknown reasons or due to power struggles within the group. These events should be expected and the sanctuary managers should have backup systems, enclosures or facilities in place to allow for regrouping of these individuals.

Daily monitoring of the group, especially with regards to dominance hierarchy, is recommended. Caregivers should be extremely careful to measure levels of aggression within the groups and towards individuals to avoid gang attacks on individuals that can lead to serious or fatal injuries. It is important that indoor facilities are designed in such a way to allow large groups to break up into smaller units for overnight containment. Individuals should be able to choose where they go when confined to smaller rooms. Caregivers should be diligent in observing all individuals during feeding sessions and should do head counts at least twice a day. By providing enough space, enrichment and careful monitoring by staff, it is possible to manage large groups which include high numbers of adult males. For chimpanzees and bonobos this may comprise 30-40 individuals, for gorillas 8-12 individuals, and for monkeys 30-100 individuals although this is heavily species dependent. These figures refer to captive and not released populations.

5.2.3.5 Management of isolated individuals

It is well documented that individuals that have been isolated for many years often exhibit higher levels of abnormal behaviors compared to those living in groups (individuals isolated from infancy show a higher level of abnormal behavior than juveniles or adolescents). Such individuals are often placed within sanctuaries at later stages of development or in some cases middle age. They exhibit social ineptness and in some cases, an inability to co-exist in groups larger than one or two individuals. Apart from social issues, captive management may be impacted for example, by an unwillingness of such individuals to leave holding facilities. It is important to allow re-socialization and acclimatization to occur in a timeframe comfortable and stress free to the individual. At the same time, a program is needed to ensure that re-socialization and acclimatization does take place, otherwise no progress will be made if the individual is simply left alone. Most importantly, the needs of the individual must be taken into consideration when deciding the program. Providing a secure, consistent environment that allows the individual to accept new items/events is crucial. The individual must be very comfortable with the environment before adding a new member to the group. Initial communication with new individuals should be through bars and mesh.

In some cases sanctuaries will be left with individuals that will not integrate into a larger social group. Management needs to ensure that provisions exist to maintain individuals or pairs in appropriate facilities and not to be left in holding facilities indefinitely. Incorporation of one or two smaller enclosures that allow individuals or pairs to live in an outdoor enclosure is important. As these individuals are socially isolated, it is important to maintain a high level of enrichment. Where possible, these individuals should be able
to communicate with other primates through mesh or bars, to allow social interaction on their terms. This may slowly facilitate integration of such individuals into a larger group.

5.2.3.6 Enrichment programs/activities

The primary goal of environmental enrichment is to enhance the life of captive primates and to simulate as much as possible the behavioral repertoire of that species as exhibited in the wild. All captive environments place severe limitations on the type of social life available to primates. Even in the best of sanctuaries, which offer large enclosures and multiple social partners, individuals still do not have the freedom to socialize with, or distance themselves, from con-specifics. While enclosures may be large, they will still not replicate the rich environment of a wild habitat where groups or communities may roam around a forest of several hundred kilometers (the same applies to monkeys except that they have smaller home ranges).

There are three types of enrichment that can be implemented with primates. They are:

1. Naturalistic;
2. Environmental; and
3. Social.

The naturalistic and social programs are the most important components of sanctuary enrichment programs, since they assist in rehabilitating the primates to exhibit normal behavior as individuals and groups/communities.

5.2.3.6.1 Naturalistic enrichment

As much as possible, enclosures should replicate a wild environment. Large forested enclosures, that provide natural foods, provide an opportunity for primates to learn the phenology of the forest, orientation and movement through forested areas, and how to respond when encountering other wildlife such as snakes, birds, small mammals, insects, non-palatable or poisonous foods. Feeding four times a day simulates normal feeding bouts in the wild. If groups are living in environments where some natural feeding can take place, feeding three times a day can be adequate. Allowing individuals to sometimes sleep outside overnight in variable weather conditions and attempt nest building is also part of naturalist enrichment programs.

5.2.3.6.2 Environmental enrichment

Environmental enrichment applies to the artificial environment created to contain the primates, as well as additional furniture that may be added if the enclosure is not sufficient to stimulate a full repertoire of behavior.

- Indoor facilities should be sufficient in height for the primate to feel comfortable and explore. They should be designed to allow 100% use of the internal volume of the indoor facility. Minimum height should be 3m, preferably height 4m or above;
- Climbing structures should facilitate primate escape from one another;
- Sleeping benches, platforms or hammocks should be provided in sufficient quantity that all individuals can be bedded separately and are not expected to share. Placement of hammocks and benches should be organized so that any disturbed debris from higher structures does not fall directly onto the one below;
- Indoor facilities should provide a good external view of surroundings so that primates can observe what is happening in other parts of the sanctuary;
- For apes, sleeping materials such as hay, grass, shredded paper or hessian bags should be provided to stimulate nest building behavior;
- All primates should have shelter from the rain, night and day and the sun; and
- As combination of permanent and removable structures/objects is advisable and can include natural and non-natural objects.

Whilst PASA sanctuaries are encouraged to utilize natural materials, enrichment may be supplemented with the following if deemed appropriate and locally available: cardboard
boxes, vines, ropes, fire hose hammocks, plastic tubs, shredded paper, tires, paper bags, sheets (non-elasticated), frozen treats i.e., ice blocks, hard boiled eggs, nursery toys (push buttons toys make noise) and burlap sacks.

5.2.3.6.3 Social enrichment
One of the most important types of enrichment for many primate species, apart from a natural environment, is social enrichment. Allowing primates to express their natural inclinations, such as social living (in groups, family units or communities) is important. Whenever possible, single-species groups should be maintained in normal social groupings for the species. Where no con-specifics are available, sanctuaries should consider mixed-species groupings (however, caution against hybridization is advised).

For example, chimpanzees should be maintained in communities of no less than 15 individuals, but with the opportunity to break into smaller parties. Wherever possible, adult females should be given opportunities to migrate between communities, and groups should maintain multi-males as per their wild counterparts. This type of behavior is natural in the wild. Another natural behavior is adoption of orphans; newly arrived infants of sufficient age should be introduced to suitable adult females within the first few days post-quarantine. Frequently at least one of the females will take on the role of primary caregiver and allow humans to take a more back seat role.

5.2.3.6.4 Evaluating enrichment activities
It is important to continually evaluate enrichment devices and activities to facilitate prioritization of activities worth implementing, taking into consideration how much time and resources are required to prepare the activity versus how much time the primates spend engaged in the activities. A rating system will help staff decide which activities to implement in the time they have available to them.

For example: Two of the highest rated enrichment activities on Ngamba Island, Uganda are noted as scatter feeds and plastic water bottles (peanuts are put inside the bottles). These activities take on average 2-3 minutes to prepare, the chimpanzees engage in 5-10 minutes of activity, and financial implications are minimal, and scored 6.5 out of 10.

5.2.3.7 Cooperative training procedures
Training can be defined as a type of learning. Learning is broadly defined as a change in behavior resulting from practice or experience. When this practice is dictated by humans, the process is called training. Training primates can facilitate captive and veterinary management and also alleviate stress. Training of primates is conducted formally or informally in most captive facilities. Most sanctuaries conduct informal training without many caregivers realizing they are actually doing it. However, it is important that correct training methods are used to ensure that primates are not
rewarded for performing undesired versus desired behaviors. The best way to train is using positive reinforcement (i.e., giving the primate something that he is she wants after performance of the desired behavior).

Training can facilitate:

(a) **Veterinary management by permitting close monitoring and treatment of illnesses by:**
- Presentation of chest or back, allowing stethoscope to touch skin permitting veterinarians to listen to heart and lungs without restraint or sedation;
- Opening of mouth for oral inspections to examine and check teeth, and even permit cleaning of teeth;
- Insertion of thermometer for temperature reading, also permitting fecal samples to be taken;
- Permitting nasal and ear swabs to be taken;
- Presentation of wounds for inspection and treatment; and
- Presentation for injections (sedatives, antibiotics) and voluntary blood taking;

Training can eliminate the need to sedate individuals for annual health checks reducing the risk of anesthetic, stress to the individual animal, and financial costs to the sanctuary.

(b) **Group management by:**
- Movement of individuals/groups between areas easily on request;
- Improving acceptance of cooperative feeding which can reduce aggression during feeding sessions, particularly with dominant individuals who may monopolize food;
- Reducing or eliminating inappropriate behavior such as poor mothering, rocking, rock or object throwing etc; and
- Providing enrichment and cognitive challenges to enhance quality of lives.

For further information on training techniques, caregivers and managers should read the current literature on the subject and seek advice from qualified trainers. Primates are highly intelligent and will cooperate well with proper training. To conduct training it is recommended to recruit an experienced trainer to correctly train staff.

Attempts to train individual animals should only be initiated after adequate training is provided to staff. Training programs need to be planned and time frames maintained to avoid reinforcement of inappropriate behaviors and confusion to the animal.

5.2.4 References
The following publications are suggested text for additional reading around captive primate management.

*General reading:*


*For training:*


*For integration (chimp-centric):*


5.3 Components of a preventative health program

5.3.1 Introduction

This section provides Best Practice Guidelines for the medical management of primates in PASA Member Sanctuaries. Information is expanded on, and examples are supplied where relevant, in the first section of the PASA Veterinary Healthcare Manual11. The guidelines should facilitate the movement of animals into and out of sanctuaries without major health risks. A veterinarian in charge of non-human primates will find a lot of information in a wide spectrum of veterinary literature. The PASA Veterinary Healthcare Manual12 remains the only sanctuary-specific veterinary manual, and should be regarded as a primary text. Online resources, including the PASA veterinary list-serve are also available. The Transmissible Disease Handbook13 of the IDWG (Infectious Disease Working Group) of the EAZWV (European Association of Zoo and Wildlife Veterinarians) might be a valuable tool for diagnosis and therapy. Additionally, the O.I.E. International Animal Health Code (Zoonoses transmissible from non-human primates, 1999) and the Great Ape Health Monitoring Unit, based at the Robert Koch Institute in Berlin, can be consulted on current known zoonotic disease threats. Reference should also be made to the IUCN Guidelines for Nonhuman Primate Re-introductions and the IUCN Great Ape Re-introduction Guidelines, and the sanctuary specific PASA disease of concern spreadsheets online through the list-serve.

These guidelines, and the veterinary manual they are a part of, are for the use of PASA Member Sanctuary staff involved in the management of primates. They are not intended to be a do-it-yourself guide for solving medical problems in animals by inexperienced or non-veterinary staff.

PASA guidelines on Minimum Standards state that each sanctuary must secure the services of a veterinarian. The veterinarian must possess particular knowledge in the field of animal health as it applies to the species under their care. This means he/she must update their knowledge regularly, including information about relevant health regulations. Numerous pathogenic micro-organisms can cause diseases in both human and non-human primates, thus the potential will always exist for the transmission of disease.

13 The Transmissible Disease Handbook was developed by veterinarians working in European Zoos on diseases of concern. Each disease entry contains information on diagnosis including a list of laboratories in Europe that will conduct the test. It is updated every 5 years (last version 2008).
between the two groups - in either direction. Furthermore, pathogenic organisms can be inadvertently transferred between different groups of primates by staff working with more than one group. The veterinarian in charge must cooperate closely with the staff, sanctuary management, local human healthcare workers and the veterinary and medical authorities. In some situations they may need a close cooperation with medical specialists. The veterinarian carries considerable responsibility for the well-being of the primates and staff, and often even for public health.

Infections and infestations shared by humans and other animals are often designated zoonoses\(^{14}\), and non-human primates have always been noted for their zoonotic potential. All primates should be treated as potential carriers of zoonotic diseases. Similarly, all staff should be considered as a potential source of infection for the animals. Additionally it should not be underestimated that diseases might be spread by sanctuary visitors if the enclosure design or the management allows direct or indirect contact.

Diseases can be spread between non-human primates and humans by numerous methods, including physical contact (bites, scratches, exposure to excreted material), ingestion and airborne or aerosol transmission. A comprehensive list of specific zoonotic diseases will not be given although there are reportedly several hundred\(^{15}\). Up to date details of the most relevant diseases in African primates can be found in the PASA Veterinary Healthcare Manual.

Sanctuary staff that care directly for primates must assume a large amount of responsibility for implementing the guidelines described, however, cooperation is also required from the managers in providing adequate equipment, facilities, staff support and training.

The recommendations contained in this document are only intended as guidelines. Each PASA sanctuary member should develop its own written set of instructions for veterinary, husbandry and field staff, modifying the guidelines where necessary to take local circumstances and practices into account. This process should be carried out in cooperation with the sanctuary veterinary advisor, and the resulting document should be read and signed by all staff concerned.

**5.3.2 The role of sanctuary veterinary staff:**
- Routine inspections of the animals;
- Directing or carrying out treatment of all sick animals;
- Administration of vaccines, worming and other aspects of preventative medicine;
- Health monitoring of animals including laboratory examination of samples (via a submission process or in-house);
- Safe and proper collection and preparation of diagnostic and other samples;
- Training of sanctuary personnel in health, welfare and hygiene;
- Ensuring that post mortem examinations of animals are carried out on all deaths;
- Supervision of quarantine premises;
- The establishment of written procedures to be followed in the event of the accidental misuse of dangerous drugs; and
- In addition, veterinary staff are to be involved in/consulted on:
  - The nutrition and design of diets;
  - Planning and enclosure design;
  - Release program design and post release monitoring.

\(^{14}\) A zoonosis or zoonose is any infectious disease that is able to be transmitted (in some instances, by a vector) from other animals, both wild and domestic, to humans or from humans to animals (the latter is sometimes called reverse zoonosis)

5.3.3 Veterinary care of non-human primates in PASA Member Sanctuaries

5.3.3.1 General health
Animals that are in good general health are far less likely to carry or suffer from infectious diseases than those living on impoverished diets or in suboptimal physical or social conditions. Constant attention must therefore be paid to good husbandry practice. Good welfare stems from making sure the animals have access to five basic freedoms thus:

Provision of food and water: both food and water are basic needs: The method of food presentation, the frequency of feeds and the nutritional balance must be taken into account. Food should be presented in a manner and frequency commensurate with the natural behavior of the species, as well as its nutritional requirements, which may vary according to season. As mentioned previously (p.36) water should ideally be available ad-libitum.

Provision of a suitable environment: an environment consistent with species requirements must be provided. This should include shelter from rain, heat, cold and shade as appropriate. For example, climbing structures must be provided with appropriate three dimensional environments. A balance must be struck between hygiene and the species’ biological requirements.

Provision of animal healthcare: (a) Injury: the provision of an enclosure designed to minimize the risk of injury is required. The design should allow animals to get away from each other. In mixed species exhibits, care should be taken that one species cannot injure another. Enclosures should be designed to minimize the risk of predators entering the exhibit; (b) Disease: curative and preventive veterinary medicine should be provided. Every effort must be made to provide a correct diet and suitably hygienic environment from which pathogens are excluded or controlled.

Provision of an opportunity to express most normal behavior: animals should be allowed the opportunity to express most normal behavior, taking into account current enrichment and husbandry guidelines.

Provision of protection from fear and distress: particular areas to look at are: group composition, sex ratios and numbers of animals in an enclosure and space and furniture in both indoor and outdoor areas. Enclosure design should allow for as much normal behavior as possible, and provide areas of escape from other animals. Animals often benefit from mixed species environments. However, inter-species conflict can cause stress and this needs to be monitored, recorded and reviewed, including safety from potential predators.

An example of how general health can be maintained in a PASA member sanctuary is provided on the next page. It is recommended each sanctuary fill this section out to make it specific to their situation, and use that as the executive summary of their entire preventative health program.

An integrated preventative health system aims to highlight diseases of concern to:

- Control and mitigate effects of endemic disease by disease surveillance and biosecurity; and
- Minimize risk of imported disease by quarantine/ pre-import protocols;
- Prepare for exotic disease importation by effective disease contingency planning.
SANCTUARY:
INFECTIOUS DISEASE SURVEILLANCE PROGRAM (TO BE COMPLETED BY EACH SANCTUARY)

Who provides veterinary care in your sanctuary?:
- e.g., Veterinary care is provided by 1 full time local vet who has an internationally recognized veterinary degree. The Government has been informed of our veterinary staff via the CVO (Chief Veterinary Officer) of the country (or appropriate Governmental body that the Sanctuary operates under such as a Department for Forestry and Environment). He/she is fully aware of the requirements to report any suspicion of diseases of national importance to the CVO and a series of international veterinary advisors.

NAMES and AFFILIATIONS:

DATE:

Recognition of infectious disease within the sanctuary (Example):
- Keepers/animal care staff undertakes daily observations of all animals in their charge (monitoring of animals by researchers in field based sanctuaries).
- Keepers/animal care staff notifies the veterinary department/vet promptly of any suspicion of disease (or vet checks each animal daily).
- The veterinary department investigates each report as soon as possible (according to priority) and will take further samples for investigation as appropriate.
- Keepers notify the veterinary department promptly of any deaths, including still births.
- The veterinary department will either perform a post mortem examination or arrange for one to be performed by trained veterinary pathologists.
- Where infectious disease is suspected relevant samples will be taken for further analysis.
- Opportunistic sampling and screening for diseases of concern (in both live and dead animals) is undertaken according to the attached protocol. Pre-release screening for diseases of concern.

Preventing dissemination of infectious disease (Example):
- Measures taken will be dependant on the type of infectious disease suspected. Where there is a strong suspicion of a disease of national importance protective measures will be put into effect and the CVO will be notified immediately.
- All animals are treated promptly to reduce the chance of them disseminating infections.
- Hygienic measures (e.g., foot baths, cleaning of equipment that must be shared between enclosures) appropriate to the type of infection suspected, are put into place to reduce dissemination of disease.
- Infected animals and their contacts are isolated from unaffected animals.
- Vaccination or prophylactic treatment will also be considered dependent on the disease concerned.

Other preventative measures (Example):
- Prophylactic treatments (e.g. vaccination, worming) (see relevant protocols in PASA Healthcare Manual).
- Pre-import screening/review of disease history of incoming animals - where possible.
- Quarantine/isolation of incoming animals (see Quarantine Protocols in PASA Healthcare manual).
- Screening (+/- prophylaxis) for diseases of concern during isolation period (see Quarantine Protocols in PASA Healthcare Manual).

Audit (Example):
- Daily records kept of keeper observations. Medical records updated as required.
- Weekly review of ongoing clinical cases and post-mortem examination.
- Quarterly review of causes of morbidity and mortality.
5.3.3.2 Veterinary aspects of enclosure design

*Aim:* To provide enclosures that reduce requirements for veterinary intervention, but allow easy access if intervention is required.

Enclosure design should minimize direct or indirect contact between different primate species, keepers and visitors. All enclosures should provide adequate shelter to protect the animals from strong sun and heavy rain, as appropriate. All enclosures should include a double door system for staff entry, to reduce the risk of escapes. Often overlooked in the construction of indoor areas is the provision of adequate ventilation in indoor areas. The recommended number of air changes per hour should depend on the size of the inside enclosures, the local climatic conditions, the frequency of use of the outside areas and the total number of primates kept. Refer to Section 5.2.2 Captive Primate Housing and Husbandry for more information.

Particular attention should be paid to eliminate sharp edges from the inside and outside of enclosures, i.e., those edges on which animals and staff could cut themselves. Service passages must be sufficiently wide to prevent animals from reaching out to scratch or otherwise injure the keeping staff. Inside enclosures should be designed so that apes can be easily darted and accessed by the veterinarian without any obstacles. Refer to Section 5.2.2 Captive Primate Housing and Husbandry and the PASA Veterinary Healthcare Manual for more details.

5.3.3.3 Identification and records

*Aim:* To provide an accurate record of the veterinary management of the sanctuary.

Individual animal identification allows tracking of the animal and correlation with its medical records. All primates should be readily and reliably identifiable by the use of transponders and individual record numbers +/-tattoos/photographs, and medical records kept up to date. All PASA member sanctuaries should aim to work with the same record keeping protocols/software (e.g., a software package flexible enough to take into account the varying sanctuary setups such as ZIMS (Zoo Information Management System, being developed by ISIS (International Species Information System)) as this will allow better collation of information across the network.

5.3.3.4 Veterinary aspects of nutrition

*Aim:* To minimize nutritional disorders by providing a nutritionally balanced diet to all animals within the sanctuary

Each PASA member sanctuary should produce and maintain up-to-date records on the nutritional requirements for stage of animal life of the species under their care (e.g., juvenile, pregnancy, adult, geriatric), with special reference to malnutrition requirements. This information should then lead to a recorded current feeding plan for each species held, that can be placed in an updatable diet manual.

Well-formulated diets are vital for good health. Wherever possible, natural diets should be provided. However, if this is not possible, the diet should be based on nutritional content, rather than attempting to find ‘similar’ food items. Nutritional deficiencies may cause overt disease e.g. metabolic bone disease.

Diets should be evaluated regularly. It will be necessary to monitor the feed and the feeding practice to ensure that animals are actually eating what is being fed (i.e., not preferentially taking certain items). The diet can be nutritionally analyzed to monitor for deficiencies. Nutritional deficiencies can also be monitored for diagnostically in blood
(e.g., serum vitamin levels, hematology and blood chemistry). Radiography, to measure bone density, is a useful adjunct test where possible.

Feed should be monitored for potential poisons. It is important to check an animal’s enclosure for toxic plants (especially a new enclosure) and they should be removed if judged to be a hazard i.e., that the animals are naive and consuming them. However, primates part of a reintrogression program need to learn what to avoid and can be trained to avoid toxic plants.

Food can also be used as an enrichment device to minimize stereotypic behavior and improve psychological wellbeing. However, this sort of enrichment should not impinge on the nutritional requirements of the animal, and neither should they be vital to them.

For some species, such as great apes, a daily children’s chewable vitamin tablet (½ or 1 tablet depending on the size/age of the ape) can be a useful safeguard against vitamin deficiencies, common in situations where the correct diet may not always be available. However, supplements do not alter the necessity of species-appropriate balanced diets.

5.3.3.5 Pest control

*Aim:* To minimize disease spread by controlling vectors and animals that spread disease within the sanctuary.

Many infectious diseases of primates can be carried by invertebrate and vertebrate pest species frequently encountered in and around primate facilities. Specialist advice should be sought to reduce or eliminate such pests, which include ticks, insects such as cockroaches, snails, rodents and birds. This can be especially challenging in enclosures with natural vegetation, ponds and moats which may require constant attention in this respect. Organisms such as *Encephalomyocarditis Virus* (EMCV), *Shigella*, *Salmonella*, *Campylobacter*, *Chlamydia*, *Leptospira*, *Yersinia* and even nematodes such as *Angiostrongylus* and *Capillaria* can all be introduced or spread by pest species.

Roaming domesticated and free-ranging wild species should be discouraged from entering the sanctuary where practicable. Domestic poultry, hoof stock and dogs in particular are a potential disease threat. Under no circumstances should domestic species be farmed or housed within the sanctuary property.

All food scraps should be cleaned up regularly during the day from enclosures and food preparation areas and soiled food should be disposed of correctly and not left for rodents to eat.

Precautions must be taken to guarantee that the control measures implemented do not themselves cause harm to the animals.

Care will be needed if using pesticides to avoid contaminating human and animal food and housing areas.

5.3.3.6 Quarantine

*Aim:* to prevent importation of disease into the sanctuary. This is to prevent the introduction of new diseases to animals in captivity and from captive animals to the free-living population and to prevent possible infection of staff.

Effective quarantine is the cornerstone of a preventative medicine program. As such the length of quarantine is dictated by the diseases of concern. Three months (90 days) is often cited as a minimum to allow the incubation/investigation of these diseases of concern to take place. All primates entering a population, irrespective of their origin,
should undergo a period of quarantine. During this period a variety of screening tests can be performed to establish their health status, their vaccination status can be reviewed, and a serum bank established for each individual.

With the exception of unweaned individuals being hand-reared, direct handling of conscious animals during quarantine should be avoided. In the case of animals requiring hand rearing, where possible there should be one caregiver per individual, and that person should not have contact with other animals within the sanctuary. The animal being hand reared should be placed with con-specifics within quarantine as soon as is possible, to help with the socialization process. Refer to husbandry guidelines (Section 5.2.3.3) and Section 2 of the PASA Veterinary Healthcare Manual.

Prior to and during the quarantine period the following procedures are advised:

- In all cases personnel involved should have specific experience of working with primates, pre-shipment handling and health management.
- Quarantine isolation should be in a separate building or enclosure, with separate drainage, as far away as possible from the other animals - a minimum of 20 meters for inside housing and 50 meters for open air enclosures. With open air enclosures, a wall should surround the quarantine area and effectively restrict access.
- Animals confirmed or suspected of having contagious diseases must be kept isolated.
- Staff should enter isolation area last, preferably at the end of the day, to prevent spread of infectious organisms, or there should be dedicated staff for this area.
- Staff should wear protective clothing such as gloves and masks. Footbaths with disinfectant/separate footwear should be used.
- Strict hygiene procedures should be followed. The area should be thoroughly cleaned and disinfected when an animal leaves including food bowls and other items that were in the enclosure.
- If animals of the same phylogenetic order as the infected animal are housed together, they too should be considered contagious.
- Keep domestic animals away from wildlife.

During the defined isolation period all primates should undergo a health monitoring schedule which includes:

(a) Incoming confiscations:
- Basic information about the individual(s) should be supplied including area of origin, the animal’s weight, temperamental characteristics, whether mother or hand-reared, current diet, and any physical abnormalities even if not a clinical entity; and
- As well as information regarding the health status of the animals to be moved, any significant evidence of recent zoonotic disease occurring in people within the previous six months should be notified.

(b) Import/export between sanctuaries or other organizations:
- Because of the risk of zoonotic disease, both sanctuaries involved should review their risk assessments prior to the movement of the animals and implement protocols for management of the species involved which may be required or requested by the partner sanctuary;
- Full I.D details including description, age, sex, distinguishing characteristics, microchip number and location and in some cases photographic I.D. should be supplied;
- Basic information about the individual(s) should be supplied including the animal’s weight, temperamental characteristics, whether mother or hand-reared, current diet, and any physical abnormalities even if not a clinical entity;
As well as information regarding the health status of the animals to be moved, any significant evidence of recent zoonotic disease occurring in staff working in the sanctuary environment within the previous six months should be notified to the sanctuaries involved; and

- Full clinical details should be supplied to the recipient sanctuary preferably 21 days prior to shipment. This must include any current treatment or medication. Any significant diseases occurring within the sanctuary of origin within the previous six months should be notified to the recipient sanctuary.

Current or past usage of any form of contraception and vaccination should also be advised including the length of time used and interval of repetition together with any noted side effects even if anecdotal.

(c) Import/export between field site and sanctuary:

- As well as information regarding the health status of the animals to be moved, any significant evidence of recent zoonotic disease occurring in staff working in the sanctuary or field site environment within the previous six months should be notified to the sanctuary/field site involved;
- Pre-release quarantine. Refer to the IUCN Guidelines for Re-introduction, and
- Procedures during quarantine. Refer to the IUCN Guidelines for Re-introduction.

(d) Testing procedures:

A range of tests for disease agents and bio-parameters should be conducted during quarantine. It is recommended that the non invasive aspects of this testing (e.g., parasitology) are initiated as soon as practical. Testing requiring general anesthetic should be delayed for 7 to 14 days, depending on the animal history and physiological and psychological condition on arrival.

- Full clinical examination under a general anesthetic, including a careful assessment of weight, teeth, eyes, reproductive organs and identification (microchip);
- TB testing: refer to tuberculosis testing chapter in the PASA Veterinary Healthcare Manual for up-to-date recommendations on tests (e.g., intradermal skin testing, Polymerase Chain Reaction [PCR], Rapid tests, Multiple Antigen Print ImmunoAssay [MAPIA], culture). Intradermal palpebral test for T.B. using Mammalian Old Tuberculin (MOT) and/or bovine + avium tuberculin. Please note if using the intradermal skin test, any reaction at the 72 hour reading is considered positive, although the trend over 24, 48, 72 hours is important. Accurate reading of TB tests requires experience and expertise (refer to TB chapter in the PASA Healthcare Manual on assessing skin tests). (Note: OIE recommends two tests within 30 days of export, although this may increase the risk of false positive reactions to the second test) It is recommended this be increased to 60 days (i.e., 2 TB tests within quarantine a minimum of 60 days apart);
- A minimum of 3 fecal screens spaced evenly through the quarantine period for parasitological and bacteriological diseases of concern. Refer to the PASA Veterinary Healthcare Manual;
- Radiography if feasible, to check for such conditions as metabolic bone disease and air sacculitis;
- Haematology and blood biochemistry profiles;
- Serological tests for relevant diseases of concern - refer to the PASA Veterinary Healthcare Manual. Other pathogens may be added to this list as our knowledge of their significance advances. A wider range of viral screening tests is generally appropriate for wild-born animals;
- Banking of genetic material. See section on correct sample collection and storage in the PASA Veterinary Healthcare Manual; and
- When feasible, endocrine assessment (stress and reproductive hormonal analysis). Refer to the relevant section in the PASA Veterinary Healthcare Manual.
For additional information refer to the Section 2 of the PASA Veterinary Healthcare Manual.

5.3.3.7 Ongoing preventive medicine program: annual disease surveillance plan

Aim: To minimize circulating disease within the sanctuary by designing an effective audited disease surveillance program.

The veterinarian must design and implement an annual disease surveillance plan which is subject to annual internal audits, and PASA audits as determined by the PASA AC.

This might include:

- Daily written reports about the health of all animals within the sanctuary including any symptoms of disease, anomalous behavior, births, deaths, veterinary treatments, etc.
- Regular fecal testing for pathogenic bacteria and parasites every six months - more frequently if a particular problem is known to exist. Where an infection with pathogenic bacteria or parasites has been treated, follow up fecal samples should be examined to establish the effectiveness of treatment.
- If there is a vaccination program, the vaccine status of each animal should be reviewed annually and boosters given when appropriate.
- Serum samples should be collected and stored at minus 70 °C or below as and when the opportunity arises. Serum banks thus created can be invaluable in the diagnosis of viral disease, the determination of vaccine efficacy and in the screening for new diseases as they are described. Furthermore serum banks represent an invaluable research tool.
- Periodic (e.g., every 1-2 years) physical examinations are very useful to assess the health status of the animals. If primates are immobilized for any reason, blood samples should be collected for hematology, serum biochemistry and serology, urine should be collected for a urinalysis and a TB test performed.
- Comprehensive post mortem examination of all apes dying within the population. Refer to the PASA Veterinary Healthcare Manual for post mortem procedures.

5.3.3.7.1 Vaccinations

A PASA member sanctuary vaccination regime will be dictated by what diseases are found in the local area, what diseases are found within the sanctuary, what diseases can be vaccinated for, and what the destiny for the animals in question is (refer to the PASA Veterinary Healthcare Manual for examples). For example, it will usually be inappropriate (but not always) to vaccinate animals due for release. As and when the opportunity arises, serum samples from vaccinated primates should be tested to establish the effectiveness of the vaccine schedules.

5.3.3.7.2 Endocrinology, behavior and reproduction (contraception)

Every PASA member sanctuary must have a reproduction policy. It is currently PASA’s policy not to breed primates, unless they are an endangered species or part of an established re-introduction program, and there have been international recommendations for breeding in captivity. In these circumstances decisions are to be made on a case by case basis.

Hormonal analysis can be utilized for monitoring stress levels (for example, before and during a pre-release period), as well as pairing sexual behavior and secondary characteristics such as swellings with internal reproductive changes such as ovulation and pregnancy. Refer to the endocrinology and contraception sections of the PASA Veterinary Healthcare Manual for details.
5.3.3.7.3 Parasite control
Every PASA member sanctuary must have a parasite control policy, preferably via a test and treat protocol.

All primates in the sanctuary are by definition confined in comparison with their natural habitat. Consequently, parasites become more significant, and cause more disease, than is seen in the wild. Routine examination for endo- and ecto-parasites should be performed on arrival and at regular intervals. This is especially important for parasites with a direct life-cycle (e.g., roundworms) as large numbers of eggs can build up in the environment and infect subsequent cage occupants. Strategic use of anthelmintics will help to control certain parasites. Refer to the parasitology section of the PASA Veterinary Healthcare Manual for details.

5.3.3.7.4 Post mortem examination
A thorough post-mortem examination should be carried out by a competent and experienced pathologist or veterinarian without unnecessary delay on all animals. Particular care should be taken with primates dying in quarantine as these animals must be assumed to be of high zoonotic potential until proven otherwise.

Even if the cause of death seems obvious a post mortem examination is strongly advised as valuable information about the health of a group of animals can be obtained. For example, a parasitological examination of internal organs, including histology of the duodenum for \textit{Strongyloides}, liver for \textit{Capillaria}, \textit{Echinococcus}, \textit{Amoeba}, lung for \textit{Pneumonysses} and \textit{Angiostrongylus} etc., might give valuable hints to possible carriers.

5.3.3.8 Disease contingency planning
In disease investigations, contingency planning is mainly used for preventing an exotic disease from entering a centre, or being able to manage the situation if it does occur. In a sanctuary, these plans should lay out procedures to prevent the spread of a particular disease between the sanctuary and the wild, or a confiscation site and the sanctuary. There are examples of these in the PASA Healthcare Manual (Section 3.2) including tuberculosis, ebola and \textit{Strongyloidiasis}.

Disease control is centred on preventing pathogen transmission and disease contingency planning takes this as a starting point. Once you know how a disease is transmitted you can take steps to prevent it. These contingency measures can be revised easily as the threat changes and our knowledge of the disease and its control develops.

The contingency of how we would operate and provide care for our animals in the event of a human pandemic also needs to be considered. For example, if your sanctuary lost a third of its workforce to disease, would you still be able to care for your animals? Have people in your sanctuary been identified who would be capable of stepping into important roles in the event of a human disease outbreak? The PASA Healthcare Manual provides general advice but sanctuaries should liaise closely with the relevant in-country authorities.

Writing these plans down, in the most useful format for your facility, allows you to manage a situation clearly (so everyone knows their role in a disease outbreak emergency) and provides evidence to external agencies that you have been thinking about these issues. These plans indicate you have tried to the best of your ability and resources to prevent a major disease import or export.
5.3.4 Healthcare of people working in PASA member sanctuaries

**Aims:**
- To minimize disease spread between sanctuary animals, staff and visitors;
- To monitor health of staff and volunteers (by consent); and
- To communicate closely with local health authorities regarding local health issues and recommendations for staff disease surveillance and medical requirements.

Preventive medicine is also designed to ensure human safety and protect human health. PASA suggests sanctuary managers assess the risk of infection to employees and other people who may be working with the animals and their by-products. Where a risk is identified, appropriate preventative or control measures must be applied.

### 5.3.4.1 Pre-employment staff screening

To reduce the dangers of disease transmission to primates, prospective new staff members should undergo certain health checks, rather like the health checks carried out during quarantine for the animals. This pre-employment medical check has clear advantages for staff and employer alike, and should be developed in cooperation with the local health authority:

- New staff members should not have any contact with primates for the first two weeks of employment. This should allow sufficient time for the development of most infectious diseases that the new employee may be incubating when taken on, and for the completion of specific tests detailed below;
- Ideally the candidate should undergo a thorough medical examination by a doctor;
- Fecal tests should be conducted to establish whether the prospective staff member is carrying any pathogenic enteric bacteria or parasites;
- A skin test for tuberculosis should be carried out. If this is positive, the doctor will probably suggest further tests;
- A blood screen for hepatitis B and C should be conducted;
- Prospective staff should be offered HIV testing;
- The vaccine status of the new employee should be reviewed. It is important that vaccinations against hepatitis A, hepatitis B, tetanus, measles and polio are current.

These measures are suggested purely on medical and veterinary grounds. No comment or advice is given concerning the financial or legal implications of the tests or any treatment that may be required as a result.

### 5.3.4.2 Sanctuary volunteer requirements

It is up to new volunteers to make sure they are up-to-date with relevant vaccinations, acquire knowledge of the diseases in the area they are working, including malaria, and have taken all necessary precautions to minimize the risks of these diseases. It is also recommended that volunteers be fully medically insured. As with all new staff, a two-week isolation period is recommended on arrival.

### 5.3.4.3 Health of staff during employment

- Staff health should be monitored at least every 12 months;
- It is essential that all staff members are in good general health. People that are run down in any way are far more likely to contract infectious diseases than healthy individuals;
- Six-monthly fecal tests for pathogenic bacteria and parasites are advised;
- Each staff member should ensure that all vaccines are current; this requires monitoring by sanctuary managers to ensure compliance;
- An annual TB test is recommended. If this is positive, the doctor will probably suggest further tests;
An annual HIV test is recommended. Positive staff members should have CD4/CD8 assessment every 3-6 months, and be provided with effective HAART medication when appropriate and possible.

5.3.4.4 Staff illness and injuries
Staff that are working and sick should, at the discretion of the manager/veterinarian, be sent home or not allowed to work with susceptible animals. Colds, flu, measles, salmonellosis, viral hepatitis and many other infections can be passed to primates and may cause serious disease in an ape population.

- All injuries, accidents and illnesses of staff should be recorded;
- Bites and scratches should be thoroughly washed (not scrubbed) and medical attention sought if severe. Further detailed information should be available to staff working with animals in quarantine and animals in the collection that have been incompletely screened;
- Staff members who are ill should not work with animals or prepare food;
- Staff with active herpes simplex lesions, should not work with primates and should be encouraged to seek medical advice about treatment. Staff with children or other family members suffering under infectious diseases like measles, German measles, mumps, chicken pox, scarlet, student kissing fever (mononucleosis, Epstein Barr Virus [EBV]) should not work with apes;
- If a doctor is consulted about illness in a staff member, he/she must be made aware that the patient's work involves care of non-human primates.

5.3.4.5 Staff personal hygiene
High standards of personal hygiene are required from primate keepers if the transmission of infectious zoonoses is to be avoided.

- Frequent hand washing is probably the single most important measure to reduce or prevent the spread of infection. Washing is particularly important immediately before and after working with any primates. Hands should always be washed after handling bedding and other enclosure materials, uneaten food, feces, urine, blood, saliva and any other body secretions. Although disposable gloves should be worn when handling primates or primate material, hands should still be washed after gloves are discarded. In order that staff may wash effectively and sufficiently often, it is vital that suitable facilities are provided. These are best placed just outside animal holding areas;
- It is best practice for animal staff to wear a range of protective clothing when working in primate facilities. Generally speaking this involves the use of overalls, rubber boots, and disposable gloves. Fully protective goggles and facemasks may also be necessary where a particularly high risk of zoonotic infection exists, such as when working with any primate in quarantine;
- To reduce the risk of mechanical transmission of infectious agents between different primate facilities/houses, separate sets of protective clothing should be available for staff in each place. Work clothes should be washed in the primate unit or sent in sealed bags to a laundry and should not be taken home by staff for any reason. Boots should be washed and preferably disinfected before entering and after leaving primate houses. Suitable facilities should be made available by the management;
- People with open cuts or sores on their hands must wear disposable gloves when working with primates;
- Staff should be encouraged to keep hands away from their face when working in animal areas. It is remarkable how often people touch their faces without thinking about it! Similarly, staff should be discouraged from putting pencils, pens etc. into their mouths; and
- No smoking, eating, drinking or spitting should be permitted in animal areas.
5.3.4.6 Enclosure cleaning
- Protective clothing (overalls, boots, disposable gloves and masks, goggles) should be worn when cleaning animal areas. Protective clothing should be washed, cleaned and stored in the animal area;
- Bedding and excreta should be removed in sealed bags to avoid the spread of material by the wind; and
- Animal areas should be cleared and scrubbed before hosing down. High-pressure hoses or steam cleaners should be avoided if at all possible, as they tend to create aerosols or sprays of potentially infectious material.

5.3.4.7 Equipment
Restraint equipment should always be in good working order. Nets, gloves, squeeze cages, crushes and crates should be regularly inspected. Defective equipment can lead to injuries to animals and humans alike, and in the worst case, escapes. Equipment must be cleaned after each job to avoid the mechanical transmission of infectious material. Needles, blowpipe darts and surgical instruments should be handled with extreme care as after use they might be contaminated with various bacteria and viruses.

5.3.4.8 Zoonotic infections
Staff should be made aware if primates in their care are known or suspected to be suffering from potentially zoonotic infections. Additional measures (if any) to prevent transmission of infection should be explained. This job will fall primarily to the veterinarian.

5.3.4.9 Pregnancy
Pregnant staff should not be working with primates and should seek specialist advice.

5.3.4.10 Immuno-suppressed staff
Immuno-suppressed staff should not be working with primates and should seek specialist advice.

5.3.4.11 Veterinarians
- Many of the animals examined and treated by veterinarians will be sick and therefore the risk of zoonotic infection is often higher than for most animal care staff;
- Veterinarians must adopt the most rigorous standards of personal hygiene and wear disposable protective clothing as often as is practical;
- Particular attention should be paid to avoid the mechanical transmission of infective material via clothing and equipment, both between different primate houses and between different populations;
- Veterinarians must ensure the correct disposal of clinical waste.

5.3.4.12 Other people
It should always be remembered that all other people who have access to the primates at the sanctuary may pose a threat to the animals and may be at risk of infection. Therefore, the role and management of volunteers, students, temporary staff, contractors working in animal areas, media personnel and in some cases, visitors, needs careful consideration.

PASA strongly urges that direct contact between sanctuary animals and non-staff personnel should be forbidden, whatever the justification. Under no circumstances should children be allowed to have direct contact with infant/juvenile primates.

5.3.4.13 Staff training
- Caregivers are the eyes for the veterinarian, they are the ones who work with animals most of the day, and get to know their behavior and temperament;
- Training caregivers in observational skills and an understanding of the significance of certain changes in behaviors on the health of animals is an essential component
of preventative medicine. They should have a good working knowledge of the important primate zoonoses;
- Caregivers should be trained to act promptly to prevent an animal from becoming sick and to avert injuries;
- The relationship of the caregiver with their animals is important in reducing stress levels. Training in operant conditioning techniques is a significant advance in health monitoring and thus disease prevention;
- Ongoing staff training should also include updated information on exotic diseases that may threaten the sanctuary, as well as any disease outbreak that may occur within the sanctuary.

5.3.5 Veterinary research and collaboration
Please refer to Section 3.6.5 (p.20) PASA Research Policy. Veterinary research conducted in PASA member sanctuaries MUST comply with this policy and be of a high scientific caliber. Veterinary research must demonstrate or have implications for our understanding of one or all of the following:
- Biodiversity conservation;
- Species conservation;
- Species ecology;
- Animal health and welfare;
- Species husbandry;
- Contraception and reproductive health.

Collaborative efforts with other PASA member sanctuaries, universities, conservation agencies, governments etc., are actively encouraged.

5.3.6 References
The following publications are suggested text for additional reading around preventative health programs.


5.4 Conservation education, environmental communication and advocacy

5.4.1 Introduction
Each PASA member sanctuary is unique and provides a variety of opportunities to reach out to the public using the tools of conservation education and environmental communication. The target audiences are wide-ranging and need to be determined by each sanctuary based on the mission statement, policy and resources. But there are basic tools that each sanctuary can use to build the best program possible to achieve the greatest success. PASA recommends the following best practice to sanctuary education and communication staff to facilitate design and implementation of education and communication program.

5.4.2 Instructional design
PASA advocates that member sanctuaries consistently use an instructional design methodology to create all education and communication programs. One such program is Analysis, Design, Development, Implementation & Evaluation (ADDIE). ADDIE is a popular instructional design model and promotes a learner-centered approach to education and communication program, ensuring learning and program development does not occur in a haphazard manner and strategic goals are achieved. It provides sanctuary staff with an easy framework to follow that is iterative and based on evaluation.

A synopsis of the ADDIE model:
**Analysis:** The analysis phase, the foundation for all other phases, includes defining the problem and its source as well as determining possible solutions. It includes a thorough needs analysis and results in instructional goals and a list of tasks for the design phase.

**Design:** During the design phase, the instructional goals determined during the analysis phase are operationalized and include writing a target population description, conducting a learning analysis, writing objectives, selecting an educational model, and sequencing the instruction.

**Development:** The development phase generates the lesson plans and materials including methods of instruction, all media or materials that will be used and any supporting documentation.

**Implementation:** The implementation phase refers to the actual delivery of the program. The purpose of this phase is the effective and efficient delivery of instruction.

**Evaluation:** The evaluation phase measures the effectiveness and efficiency of the program and should actually occur throughout the entire process - within phases, between phases, and after implementation. Evaluation may be up-front, formative or summative.\(^\text{16}\)

5.4.3 Educational theory
PASA member sanctuaries provide an opportunity for individuals to have direct experience of the plight of primates. Therefore, PASA advocates for the use of educational theory that fosters such learning, more specifically for the use, where possible, of experiential learning and the implementation of learning styles in all programming.

Experiential learning and experiential education represent the same education theory applied in different settings. The theory is that people learn better when they engage in direct participation or personal experience. Experiential learning refers to the individual learning that results from unstructured life experience or informal education. Sanctuary visits are informal learning opportunities and represent a direct experience of primates.

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that can be capitalized on through experiential opportunities to deepen knowledge and promote action on behalf of primate conservation. Experiential education takes the theory of experiential learning and applies it to a formal education setting such as school where the emphasis is placed on facilitated direct participation and reflection in order to create meaningful and long lasting learning.

Similarly each person is an individual and learns differently. Also known as learning styles, each person has a preferred way of internalizing knowledge. In order to design the most effective education and communication programs, sanctuaries should ensure that each program is designed with a learning style lens, i.e., evaluate it against the learning style model. There are several different models of learning styles with the most popular one being David Kolb’s\(^\text{17}\). Kolb said that there are four learning styles and every designed experiential learning opportunity should use all four to ensure maximum learning. However, all learning style models basically share the same concept that people learn best either feeling, thinking, doing or watching and that a well designed program includes opportunities to do all four. A good example of a sanctuary based environmental education program that utilizes the four learning styles is the Planet Program designed by the Jane Goodall Institute, Republic of Congo. It is divided into four sections each using a different educational activity that appeals to each learning style thereby ensuring the greatest opportunity for each student to learn about environmental education.

**5.4.4 Communication theory**

PASA member sanctuaries engage in regular and on-going communication. There are various levels and styles of communication but in its most simple form sanctuaries typically are involved in either rhetorical and/or relational communications\(^\text{18}\). The purpose of rhetorical communication is to persuade and influence the audience – this is what we do when we encourage sustainable behavior and environmentally, or primate-friendly choices. Relational communication is aimed at building a relationship between the sanctuary and an audience. For example, this can be informing visitors and neighbors about the purpose and importance of the sanctuary, convincing potential donors to support the organization, or developing partnerships with government agencies and other NGOs. Both types of communication play a significant role in achieving the goals of primate conservation.

Which communication style used is a function of the situation, resources and the specific audience. However, the way a sanctuary sees itself and the role of its staff also has a major influence on how it communicates with stakeholders, and how the stakeholders perceive the organization. The term “communication relationships” has been adopted\(^\text{19}\) (Figure 3, p.65).

In a technocratic relationship, experts such as sanctuary staff, veterinarians, or biologists see decisions as technical in nature and make those decisions based on their knowledge and experience. In this context there is no role for the public, so there is no communication. This style was prevalent in early conservation projects and re-introduction efforts.

Former U.S. President Thomas Jefferson, in the late 18\(^{th}\) century, wrote about the importance of a well-educated public, and that they should participate in decisions that affect them. People become educated by receiving information from experts, and then they participate in decision-making. When this approach emphasizes the experts


informing the public, Waddell calls it a “One-way Jeffersonian” relationship. This
recognizes the relationship between the sanctuary and its audiences, but limits input
from the public.

When the PASA member sanctuary is listening to and incorporating input from the public
in addition to giving out expert information, this represents an “Interactive Jeffersonian”
relationship. This is more in keeping with the democratic ideal. However, this relationship
maintains the separation between rational experts that contribute expertise and an
uninformed public that contributes values, emotions and beliefs.

A fourth type of relationship is called “Social Constructionist”. In this situation there is a
flow of information between the experts and the public (with room for science and local
knowledge) and a sharing of expertise, values, emotions and beliefs. The different
expertise of the scientist and the resident or elder can be included in the same process.

Sanctuary communications fall within a spectrum of these four styles. There are
significant differences in how sanctuaries develop their relationships with different
audiences which is a reflection of the audiences, resources and the preparedness of
sanctuary staff and members of the public to engage in communication and collaborative
decision-making. However, it is critical for long-term success that sanctuaries recognize
that they are in communication relationships, define which ones and choose the tools
accordingly that will help them achieve the best result.

**Figure 3: Communication relationships**

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5.4.5 Thematic interpretation

PASA member sanctuaries are conduits between the primate world and the human world. They operate as translators, explaining the lives of primates and highlighting the threats they face, to people who may not be familiar with the science or natural history, using terms and ideas that can be readily understood by the audience. This “interpretation” is critical to the conservation success of sanctuaries.

Interpretation is an educational activity which aims to reveal meanings and relationships through the use of original objects, first hand experience and illustrative media, rather than simply to communicate facts\(^\text{21}\). Using the following four principles of interpretation makes it easier to for the audience to follow the flow of information and ensures a higher retention of knowledge:

1. Interpretation is pleasurable: all good communication is entertaining in the sense that it holds the audience’s attention.

2. Interpretation is relevant: all effective communication has two qualities – it is meaningful (something we are able to connect with and know about) and personal (something we care about).

3. Interpretation is organized: communication should be presented in a way that is easy to follow and does not require a lot of effort from the audience. One of the key ways to do this is to restrict the topics of a communication to maximum five topics and have a theme.

4. Interpretation is themed: to evolve from a presentation into interpretation a main point or message is required which then allows the educator to organize their topics.

Thematic interpretation develops an overarching theme to which all other communication relates. Studies show that audiences tend to recall themes along with five or fewer topics or ideas and forget the rest. Therefore, it is critical that sanctuaries practice thematic interpretation in their programs to ensure that audiences are retaining the messages they want to convey about primates and primate protection.

For example a theme for an interpretation talk at a sanctuary could be; “To understand chimpanzees, one must understand ourselves”. Then the interpreter determines a maximum of five topics that they want to address during their talk in order to convey the theme such as: we share 98.5% DNA; similar social systems; shared behaviors, emotional connections and threats. In this way the sanctuary can ensure that the audience is absorbing their key messages about the primates under their care.

5.4.6 Evaluation

Evaluation is the central foundation of successful education and communication programming. Evaluation is the process of systematically collecting data (factual information) to determine if program objectives are met, and to what degree, as well as determining which activities, messages and materials work and which do not. Evaluation is an all encompassing process which takes place at the beginning, during the program, and at the end typically in the forms of needs assessment, is formative and summative. Needs assessments are used at the beginning of every program to determine how the program should be designed based on the needs of the learners. Formative Evaluation is conducted during and between phases. The purpose of this type of evaluation is to improve the instruction before the final version is implemented. Summative Evaluation usually occurs after the final version of instruction is implemented. This type of

evaluation assesses the overall effectiveness of the program. Data from the Summative Evaluation is often used to make a decision about future programming.

One popular tool of evaluation is the pre-post test. PASA member sanctuaries can use this method to measure the change in knowledge, attitudes and behaviors of individuals that participate in their educational programming.

5.4.7 Community engagement
PASA member sanctuaries are long-term projects that are embedded in the local context and the local community. It is important to engage communities in the sanctuary goals, objectives and mission to protect primates. Conservation education and environmental education allow sanctuaries to build functional relationships with local and national communities which must be treated as stakeholders in the process. Community members must be consulted on all programs that are brought into their communities. This can be handled simply through transparent, respectful and democratic processes that include a thorough needs analysis as part of an up front evaluation process, coupled with summative evaluation and a feedback system. While communities and sanctuaries may have different overall goals they are inextricably linked and using the tools of environmental communication, they can work to achieve each other’s goals. In the absence of, or without adequate priority of community engagement, in the long-term, relationships can erode and impact the sanctuaries ability to operate successfully. Therefore, ongoing and thorough education and communication are necessary to ensure positive outcomes.

5.4.8 References
The following publications are suggested text for additional reading around conservation education, environmental communication and advocacy.


PART 6: PASA MEMBERSHIP AND CRITERIA

Since the establishment of PASA in 2000, interest in joining the alliance has steadily increased. PASA’s accreditation and inspection procedure is designed to ensure that only qualified institutions can join. Applicant sanctuaries meeting PASA standards will be awarded sanctuary member status. Membership to PASA is open to all primate focused sanctuaries located in Africa compliant with PASA standards and who fulfill the commitment to a high level of professionalism that membership entails.

6.1 Sanctuary Membership

Sanctuary Members must:

1. Operate a primate sanctuary within Africa (primate focused sanctuary but recognizing some members also take care of non-primate species, with the welfare and conservation of all species considered equal);
2. Abide by national and international wildlife laws and conventions;
4. Comply with PASA’s Minimum Standards;
5. Attend annual PASA workshops: management, veterinary, education (and keeper):

   The management workshop requires senior level representation able to make decisions and participate in voting on behalf of the sanctuary. Attendance at the veterinary, education and keeper workshops is designed to build national capacity and aimed at long-term national staff members. It is expected that nominated individuals attending the workshops will, upon returning to their facility, convey the information to all relevant staff to further build capacity throughout the facility;

6. Pay annual membership fee of USD $1000. The annual membership fee must be paid either by 30th June or the annual management meeting (whichever comes first);
7. Display PASA membership Certificate at the sanctuary;
8. Display PASA logo on sanctuary website, and all promotional literature and presentations;
9. Aim to reduce and limit the environmental footprint of the facility and its activities;
10. Once every 5 years complete an Accreditation Questionnaire to re-evaluate compliance to PASA Codes, Policies, and Minimum Standards.

Sanctuary Members receive:

1. Access to advice, technical and logistical assistance (remote and non-remote) in emergency and non-emergency situations;
2. Support in fund-raising activities and alliances;
3. Funded attendance for 1 representative from each facility (person specification indicated earlier) to attend annual management meetings;
4. Funded attendance for 1 representative from each facility (person specification indicated earlier) to attend capacity building workshops focused on designing, delivering and managing education and community engagement programs;
5. Funded attendance for 1 representative from each facility (person specification indicated earlier) to attend capacity building workshops focused on animal health and welfare issues (veterinary focused);
6. Funded attendance for 1 representative from each facility (person specification indicated earlier) to attend capacity building workshops focused on animal husbandry and management issues;
7. Voting rights at annual management meetings;
8. Certificate detailing Sanctuary Membership status;
9. Representation by PASA at relevant international conferences and meetings;
10. Access to corporate sponsorship i.e., veterinary products, educational materials, etc;
11. Strategic partnership development and management;
12. Notification of relevant conferences, meetings, training opportunities, publications, funding opportunities, activities, news;
13. Opportunity to nominate 1 staff member to be considered for the Siddle-Marsden Annual Award (Annex II);
14. Eligible to apply for support from the PASA Crisis Fund (Annex III);
15. Hard and electronic versions of PASA manuals and documents; and

Sanctuary Membership status can be revoked (temporarily or permanently) if:

1. Members do not comply with PASA’s Minimum Standards, Policies and Codes.

   Any complaint registered against a facility will be investigated. Serious allegations will automatically require an onsite inspection.

   Every five years Sanctuary Members are requested to complete an accreditation questionnaire to assess continuing compliance with PASA’s Mission, Policies and Minimum Standards. If during this process it is confirmed that the institution is contravening membership criteria, membership may be temporarily suspended. If deemed necessary, a screening mission would then be organized.

   If a facility does not respond in an appropriate manner (as deemed by the AC) or does not permit an on-site inspection, membership may be temporarily suspended. If a facility continues to fail to cooperate, membership may be cancelled. Members can reapply to become sanctuary members no less than 12 months from the date of their expulsion, and will follow the standard procedure for membership which automatically requires an onsite inspection. Furthermore they must be able to demonstrate that previous factors leading to the cancellation of membership are no longer present.

2. Members continually fail to send an appropriate representative to the PASA management workshop (person specification detailed earlier).

   All sanctuary members are required to nominate a delegate to attend the annual PASA management workshop. In most cases, this is the sanctuary director. If that person is unable to attend, every effort must be made to nominate a suitable replacement. Absence for two concurrent years from the PASA Management Workshop may result in temporary suspension of sanctuary member status. Further absence may result in cancellation of membership.

3. Non payment of annual membership fee.

   If payment is not received within one month, a reminder is sent. If the payment is not received all privileges that membership confers with reference to sending national staff to education and veterinary workshops is withdrawn for a one year period. If non-payment continues, membership is cancelled.

6.2 Annual membership renewal

PASA sanctuary members are sent email reminders by the PASA Executive Office (PEO) one month before their annual PASA membership fee is due. As stated earlier, failure to pay the fee may result in cancellation or suspension of membership. If a facility is
experiencing financial difficulties and cannot pay on time, the PEO should be informed and a mutually agreeable financial plan may be organized.

Annual renewal of sanctuary membership is automatic; it is assumed that facilities continue to fulfill membership obligations, and wish to remain members of PASA, unless otherwise informed.

Sanctuary members will be required to pay the sanctuary membership fee within three months from the date of their official acceptance.

Once every five years, sanctuary members are requested to complete an Accreditation Questionnaire to comply with membership obligations (Annex III). The questionnaire will provide an update on facility status and practice and provide indicators as to whether a facility is still complying with membership obligations.
PART 7: PASA ACCREDITATION AND COMPLAINTS PROCEDURE

7.1 Introduction
PASA represents and links African primate sanctuaries, and aims to maintain or increase the standards of these institutions. PASA sanctuary membership is only awarded to sanctuaries that apply to join PASA and meet specific standards and obligations. Policies and standards are regularly updated and refined to incorporate innovative methods, developing best practice and science.

PASA’s accreditation and inspection system is designed to ensure that only African primate sanctuaries that comply with the obligations of membership can join the organization. PASA does not grant membership to individuals, and will only consider applications from groups or organizations that meet the defining terms of a PASA sanctuary (see Section 3.2, p.12 for the definition of a PASA Sanctuary).

The PASA accreditation procedure offers a framework for assisting sanctuaries to achieve their aims, and an opportunity for independent review and validation of their efforts. The PASA accreditation procedure ensures clarity, transparency and confidence in PASA, both to the wider captive management community and other external agencies.

The different steps within the accreditation procedure include:

**Step 1: Administrative procedure**
The administrative procedure includes an information request by an applicant institution, sending the application package, and screening of the completed application.

**Step 2: Inspection mission**
The inspection mission includes a site-visit and assessment by a PASA inspection team, along with the preparation of an assessment report.

**Step 3: Decision on membership**
The decision on membership includes the analysis, discussion and vote on whether or not to grant membership to the applying institution.

Sections 3 and 4 of this manual describe the obligations of the applicant and Annex X provides summary guidelines for applying members.

7.2 The PASA accreditation procedure
The PASA accreditation procedure is designed to guide an institution through the steps necessary to become a sanctuary member. This procedure applies to accreditation of both new members and those seeking to re-establish sanctuary membership following temporary suspension based on non-compliance to PASA codes, policies and standards.

The PASA accreditation procedure is made up of 3 steps, which are described in the following paragraphs. A visualized version of the PASA accreditation procedure can be found at the end of this manual (Annex VII).

**Step 1: Administrative procedure**
The administrative procedure begins with a formal request for information regarding PASA membership. The PASA Executive Office (PEO) responds by providing the institution with a copy of the PASA Operations Manual which contains all the necessary information for applicants: PASA Codes, Policies, Operational Philosophy, Minimum Standards, Best Practice Guidelines, and guidelines for applying members (Annex X). Whilst an example of the application form is part of the Operations Manual, a separate Microsoft word format version is sent to facilitate electronic submission (Annex VIII). When an institution submits a completed application, which includes payment of the non-refundable application fee, the pre-inspection process is initiated.
positive outcome, the application will proceed in the accreditation procedure to Step 2: The Inspection.

**Information request by applicant**
Institutions interested in becoming a PASA member must first request a PASA Application Package from the PEO. Institutions that submit a request by email will immediately receive a response to acknowledge receipt of the request, with the PASA Application Package to follow via e-mail within two weeks.

Requests for the PASA Application Package sent by surface mail will be dispatched within two weeks of receiving the requesting letter; arrival date will clearly depend upon the destination address. PASA urges all applicants to submit enquiries by email for speed, cost and environmental concern.

Institutions seeking PASA membership are strongly encouraged to consider why they wish to join PASA and whether they are compatible with the very ethos of PASA (Section 3) and if they believe they are compliant with PASA Policies and Minimum Standards (Sections 3 & 4). Upon receipt of the PASA membership application and payment of the application fee, the application process begins. In submitting an application form the applicant agrees that the information provided is true and accurate. During this time the institution’s application will be processed and considered. At the end of this period, PASA will either vote to grant or deny sanctuary membership.

**Accreditation fee**
The accreditation fee for sanctuary membership is USD$500. New applying members are advised to check the PASA website for any updates relating to changes in accreditation and membership fees.

**Pre-screening process**
PASA starts the pre-screening process after an institution has returned the completed accreditation questionnaire along with the requested appendices, and after it has paid the appropriate non-refundable accreditation fee. To ensure a proper evaluation, every application is handled thoroughly.

The questionnaire requests information on:

- Contact information
- Information on:
  - Status and structure of the sanctuary
  - Mission, goals and strategic plan
  - Financial matters
  - Veterinary care (including contraceptive protocol)
  - Wildlife collection and numbers (primate and non-primate)
  - Captive management (including husbandry, breeding)
  - Staffing (composition and numbers)
  - Safety and security
  - Conservation
  - Environmental Education
  - Research

The applicant may be asked to provide answers to specific questions or provide more detailed information. Any additional information will be processed and added as an appendix. The completed application will be forwarded by the PEO to the CEO and to the AC. During pre-screening the CEO and AC will decide whether the applicant institution may potentially qualify to become a sanctuary member.
If the applicant clearly does not represent PASA’s mission or indicate a clear willingness to abide by PASA Codes and Policies, Minimum Standards and aspire to Best Practice Guidelines, its application can be denied in the administrative phase, thereby saving time and money for all parties concerned.

If an institution is denied membership in the administrative phase, the PEO will inform the facility of the decision through an explanatory letter (signed by the CEO) via email.

If in the administrative phase it is clear that a facility applying for Sanctuary Membership does not presently comply with PASA’s Codes, Policies, etc., but clearly aspires to do so, then the institution will be encouraged to resubmit an application. PASA will continue to work with that institution to encourage efforts to improve levels of care and operation.

If the pre-inspection process has a positive outcome the application will proceed to Step 2. The applicant will be informed that it will proceed to Step 2 in the accreditation procedure and is requested to re-confirm its interest to join PASA.

Decisions concerning approval in the administrative procedure are based on certain criteria:
- Applicant should actively demonstrate a commitment to PASA’s Mission;
- Applicant should adopt PASA’s Code of Conduct, Policies, Operational Philosophy and Principles;
- Applicant should meet all Minimum Standards;
- Applicant should leave a good impression on paper/during telephone conversation;
- Applicant should be cooperative during the administrative procedure;
- Applicant should have a positive attitude towards improvement.

**Step 2: Inspection mission**

Step 2 in the accreditation process involves the preparation of an inspection mission, the inspection mission itself and the work after the inspection mission. When an institution proceeds to Step 2, the PEO will organize an inspection mission to that institution.

Inspection involves a thorough review of facilities and operational procedures of the applicant by a suitably qualified PASA representative or PASA team, plus particular areas of concern if a complaint has been filed. PASA inspectors are selected by the PEO based on possessing the relevant skills to assess the facility in question. The sanctuary is informed of the PASA inspector to be sent to their facility and if they can demonstrate reasonable justification as to why that person is not suitable, an alternative inspector can be organized.

**Criteria to be a PASA inspector:**
- Fully cognizant and supportive of PASA’s Mission, Polices, Minimum Standards and Best Practice Guidelines;
- Have a minimum of 5 years experience of working in a relevant sector that could include African sanctuary management, primate veterinary medicine, primate welfare and behavior, specific in-country knowledge of relevant policy, legislation and pertinent issues etc;
- Have a good knowledge of the English language (both written and spoken) and in some cases a second language relevant to the country being visited (i.e., French, Kiswahili, Portuguese);
- Impartiality with reference to the particular institution to be screened;
- Be able to take leave from their employment to undertake the mission.

**Inspection preparation**
The size and characteristics of the applicant facility will dictate the duration of an inspection but a minimum three days is deemed necessary.
Once the PEO has identified the need for an inspection mission, and a PASA inspector agreed on, a time period for execution is agreed between the applicant (it is important to ensure that sanctuary management and other relevant persons are available during the screening process) and the inspector. If there is more than one inspector, PASA will designate a lead inspector. The PEO initially handles all correspondence between the facility and the inspector during this phase. However, once a time frame has been agreed, and an official introduction between the applicant facility and PASA inspector is made by email, the logistics of travel and accommodation are left to the inspector to organize with the facility, although the PEO must be kept informed of all arrangements.

All the costs associated with the mission are the responsibility of the applicant. In-situ sanctuaries are often aware of economical flight companies and routes, and furthermore may be able to personally accommodate the PASA inspector. Therefore it is requested that the PASA inspector coordinates the mission with the applicant to ensure that costs are kept to a minimum. It is important that accommodation organized for the PASA inspector is considered safe and secure. The PASA inspector should receive agreement from the applicant to pay the specified costs presented by the inspector in advance of travel.

All inspection costs will be reimbursed by the applicant. Therefore the PASA inspectors should keep detailed records of all expenses incurred with receipts. The PEO should be provided with an estimate of costs to be incurred once travel and accommodation costs have been arranged. Where possible the applicant will cover all in-country costs, and PASA will reimburse the inspector upon completion of the mission. However, as PASA will seek reimbursement from the applicant facility, it is imperative that the inspectors keep detailed records of all expenses and receipts.

The PASA inspectors are responsible for consulting the relevant authorities to confirm if it is safe to travel to the country in question (this should also be reassessed immediately prior to departure), arrange a visa if one is needed, and relevant insurance.

Prior to the mission, the PASA inspector will be provided with all the relevant available information such as completed accreditation application form and appendices. Furthermore, the applicant may be requested to update certain relevant information (e.g. animal inventory list) as some information may be outdated by the time of the inspection mission.

The PASA inspectors will also be provided with an Inspection Questionnaire (Annex XI) but are requested to provide additional details where deemed relevant. Inspectors are requested to re-familiarize themselves with PASA’s Mission Statement, Policies, Minimum Standards and Best Practice Guidelines, and take hard copies with them on the inspection mission.

**Actual inspection**

An inspection mission should start at approximately 08:30 in the morning. After an introduction of all parties, the lead inspector explains the goal of the inspection mission, and the decision making process on membership and/or complaint filed.

Secondly, the PASA inspector should observe the premises of the applicant institution (including off-site areas such as food storage and preparation, quarantine, vet clinic). During this tour, relevant staff members should accompany the PASA inspector to answer any questions. It is advisable that all inspectors conduct the tour at the same time to facilitate cross-comparison of impression and opinion.

After this general survey, the PASA inspector should meet with relevant staff members to discuss matters that could not be observed during the tour (e.g. conservation efforts,
environmental education and research activities, veterinary and safety procedures, record keeping and master/future plans).

The PASA inspector should also make time to take an unaccompanied tour of the facility (if possible i.e., with a release site this may not be appropriate or possible) and also shadow staff in their daily routine activities.

The PASA inspector should complete the inspection questionnaire and once more meet with the director and relevant staff of the facility to discuss matters that may need clarification or that are obviously in need of improvement. After this final meeting, the PASA inspector can depart. It is not in the remit of the PASA inspector/s to inform the director or staff of the sanctuary if they are successful in their application to become a member of PASA.

**Screening mission report**

Within one week of returning from the mission, the PASA inspectors are requested to submit the completed Inspector Accreditation Questionnaire (Annex XI) with any additional information including photographs to the PEO. If there is more than one inspector, a designated lead inspector will collate all information and submit on behalf of all members of the inspection team. All PASA inspectors are expected to use the questionnaire to maintain conformity although additional sheets can be attached if deemed necessary. The PEO may request additional information if deemed necessary and it may be necessary for the PASA inspector to contact the sanctuary for the information in question. After the report has been approved by the PEO, it will be forwarded to the CEO and AC for consideration.

PASA inspector will be asked for their professional opinion on whether the facility meets the criteria for Sanctuary Member status. If a facility does not comply with PASA’s Codes, Policies and Minimum Standards, PASA inspector are expected to detail what areas do and do not comply in the report, and provide a prioritized list of work for the applicant to undertake to facilitate compliance. However, final decisions on membership are decided by the AC taking into consideration all the information presented.

**Screening mission costs**

All inspection mission costs must be paid by the applicant. These can include:

- Travel costs: flight tickets (international and internal), car hire, fuel costs, parking fees, taxi rides, bus/train tickets etc.
- Accommodation
- Food and drinks (non-alcoholic drinks only)
- Visa
- Insurance

PASA and the applicant institutions will aim to settle all costs incurred by the PASA inspector/s either during an inspection mission or within two weeks following submission of the final report. The PEO should be provided with an overview of all costs incurred.

**Step 3: Decision-making process on membership**

The completed Inspector Accreditation Questionnaire is sent by email from the PEO to the CEO and onto the AC to consider on whether to grant membership. AC members may request additional information pertinent to the decision of membership that is not in the report. In this case the CEO will request the PEO to liaise with the PASA inspector(s) so that the relevant information, if available, is communicated.

All votes on membership will be taken by the AC via email. AC members will be invited to discuss and debate each application, and sanctuary membership status will be granted on the basis of a majority vote.
If a sanctuary is denied membership in the inspection process, the PEO will inform the facility of the decision through an explanatory letter (signed by the CEO) via email.

If sanctuary membership is granted, the PEO informs the applicant and re-iterates membership responsibility and requests confirmation of interest to join PASA. If the facility accepts, a letter of confirmation and congratulation is issued from the CEO to the facility. The facility is also sent a certificate that names the facility as a member of PASA and provides a time frame of membership (always annual). A scanned version of the certificate is sent by email and a hard copy by surface mail. Recipients are requested to display the certificate and notify the relevant government partner(s) that it has attained sanctuary membership from PASA.

Sanctuary members are requested to place the PASA logo (and internet link) on their respective websites, literature and on all presentations made.

Sanctuary members are expected to pay the annual membership fee within three months of being issued sanctuary membership.

7.3 Complaints procedure
Sanctuary members are required to comply with PASA Codes of Conduct, Principles, Policies and Minimum Standards. Failure to comply can result in the loss (temporarily or permanently) of sanctuary membership status or expulsion from PASA entirely. Any complaints, allegations or concerns regarding sanctuary members may factor into the decision to penalize a facility.

PASA will only consider official written complaints, and will not accept complaints from anonymous sources. Photographs and video may be accepted. Every effort will be made to analyze complaints or allegations for their veracity, and named members will be given an opportunity to address the allegations or complaints.

Complaints against sanctuary members
When the PEO receives an official written complaint on a sanctuary member, this is shared with the CEO and AC, and then forwarded to the sanctuary in question, to provide it with the opportunity to respond to the allegations. Requests by those issuing the complaint to remain anonymous to the sanctuary in question will be respected. The sanctuary is asked to respond directly to the CEO, which will share that information with the AC. If the complainant has not requested to remain anonymous, and the sanctuary wishes to respond to the person or institution that filed the complaint, it is required to send a copy of that correspondence to the CEO.

If necessary, an inspection team, which will be organized by the PEO and paid for by PASA, may also be part of the investigation.

If the sanctuary responds positively and demonstrates an active willingness to work with PASA to improve the areas of concern, membership status will remain unchanged. However, if, following receipt of the allegations, the institution does not respond to the satisfaction of the AC, it may be decided to temporarily suspend membership status for a specified period of time. A sanctuary will only be considered for suspension of membership following delivery of a written warning. If no compliance occurs, the AC will consider the status and take a simple majority vote on whether to evoke membership.

Areas of non-compliance
It may be possible to identify the exact area/s of non-compliance from the complaint report submitted or from the facility itself, and in some circumstances an inspection team may not be required to visit the facility. In this case a sanctuary will be asked to perform the necessary action/s and provide evidence that the facility is now fully compliant with
PASA standards and obligations. However, in some cases an on-site inspection will be required.

In the spirit of inclusiveness and capacity building (founding principles of PASA) sanctuaries with suspended membership status continue to be invited to attend annual management meetings, and to send relevant representatives to annual training workshops. However, the sanctuary is not granted voting rights at the managers’ meeting. During this period the sanctuary will be offered appropriate guidance, technical advice and assistance to facilitate re-accreditation to sanctuary member status.

Regardless of membership status, the sanctuary must provide monthly updates (in brief) to the CEO on the status of the situation. Furthermore, six months after a sanctuary has made a commitment to improve areas of concern, a progress report must be filed by the sanctuary with the CEO. The progress report should focus on delivery of key obligations and standards accompanied by evidence (e.g. pictures, other supporting documents). If the institution believes that it meets and upholds PASA standards and obligations, and is supported by evidence in the progress report, the report is submitted by the CEO for referral to the AC.

The AC can decide to extend the period of time needed to become fully compliant with PASA’s standards if the facility is clearly making efforts to improve and comply but not yet fully compliant. In this case the sanctuary will be required to continue providing monthly briefs and progress reports. If on paper the facility appears compliant, an inspection mission is organized as per the standard procedure. A full inspection is required although specific areas of concern will be focused on. The AC can only re-establish sanctuary membership if a facility fulfils and complies with all PASA standards and obligations.

If the facility does not appear pro-active in taking the necessary action/s for compliance or indicates an unwillingness to comply with requests for information, and after the agreed period of time fails to comply with PASA’s membership obligations, membership may be revoked. In this case the facility is no longer entitled to any benefits assigned to members including invitations to annual meetings and workshops (See Section 6.1). In this case the facility must remove all PASA logos indicating PASA membership from its website and all literature. Membership fees are non-refundable.

On occasion, PASA may provide logistical advice, technical support and assistance in leveraging funding for sanctuaries that are experiencing specific difficulties and challenges. In this case (as per the procedure outlined above) the sanctuary must provide monthly updates (in brief) and submit a progress report six months after receipt of PASA support. Additional progress reports may be required if the period of assistance is extended.

AN IMPORTANT NOTE:
The criteria and procedures of the accreditation program are under continuous review by the AC.
# PART 8: ANNEX

## Annex I: List of PASA Sanctuary Members

1. **APE ACTION AFRICA (formerly Cameroon Wildlife Aid Fund)** – Cameroon
2. **CENTRE DE CONSERVATION POUR CHIMPANZES (CCC)** – Republic of Guinea
3. **CERCOPAN** – Nigeria
4. **CHIMFUNSHI WILDLIFE ORPHANAGE** – Zambia
5. **CHIMPANZEE REHABILITATION ASSOCIATION (CRA)** – Gambia
6. **DRILL REHAB & BREEDING CENTRE (DRILL RANCH)** – Nigeria
7. **HABITAT ECOLOGIQUE ET LIBERTE DES PRIMATES (HELP Congo)** – Republic of Congo
8. **JGI CHIMPANZEE EDEN** – South Africa
9. **LIMBE WILDLIFE CENTRE (LWC)** – Cameroon
10. **LOLA YA BONOBO** – Democratic Republic of Congo
11. **NGAMBA ISLAND CHIMPANZEE SANCTUARY** – Uganda
12. **PROJET PROTECTION DES GORILLES (PPG Gabon)** – Gabon
13. **PROJET PROTECTION DES GORILLES (PPG Congo)** – Republic of Congo
14. **SANAGA-YONG CHIMPANZEE RESCUE CENTRE** – Cameroon
15. **SWEETWATERS CHIMPANZEE SANCTUARY** – Kenya
16. **TACUGAMA CHIMPANZEE SANCTUARY** – Sierra Leone
17. **TCHIMPOUNGA CHIMPANZEE REHABILITATION CENTRE (JGI-Congo)** – Republic of Congo
18. **VERVET MONKEY FOUNDATION (VMF)** – South Africa

*Refer to the PASA website for information on the individual sanctuaries and links to their respective websites.*
Annex II: Siddle-Marsden Award

The PASA Siddle-Marsden Award was created to honor sanctuary pioneers David Siddle and Stella Brewer Marsden. The award is given annually to an African national staff member at a PASA sanctuary that best exemplifies a commitment to primates, a commitment to conservation, and a commitment to excellence.

Each sanctuary may nominate one staff member. Each nominee must be an African national and must be employed by the sanctuary. No volunteers or expatriates are eligible.

Nominations are requested in the first quarter of each year and sanctuary managers are requested to state in 500 words (or less) how the nominee exemplifies a commitment to primates, a commitment to conservation, and a commitment to excellence. A recent photo of the nominee must be submitted with the application.

Applications are reviewed by the PASA Award Subcommittee, and a final vote is made on the top three by the PASA AC.

One winner is selected each year and the announcement is made at the annual PASA Management Workshop. The winner receives an engraved plaque and $250 USD monetary award (for personal use), and is invited to attend the annual management meeting.

By submitting this application, the PASA member sanctuary acknowledges, understands and agrees that PASA will publicize the winner of the PASA Siddle-Marsden Award, including the name of the sanctuary and project information.
Annex III: PASA Crisis Fund

The Pan African Sanctuary Alliance (PASA) Crisis Fund was developed to provide an immediate means of addressing urgent needs in PASA member sanctuaries that compromise the normal operations of the facility and/or threaten the health and welfare of the primates and/or staff.

The PASA Crisis Fund was established in 2005, initially through a grant from Care for the Wild International, and has since been funded through a variety of grants and public donations.

The PASA Crisis Fund is primarily designed to counter extraordinary circumstances brought on by natural disasters, disease outbreaks, or events beyond the scope of day-to-day operations.

Due to the nature of the fund, a full proposal is not required however PASA member sanctuaries must submit complete an application form (p.81). A PASA review panel assesses each request and is committed to provide a response within 48 hours. Sanctuaries that receive support from the PASA Crisis Fund must report the outcome of the crisis situation within 3 months of receiving the fund.

No PASA member sanctuary may request funds from the PASA Crisis Fund more than once in a 12-month period. An application may be submitted at any time. Awards are normally restricted to a maximum $5000.
1. Name of sanctuary:

2. Contact details:

3. Title of project or need:

4. Species targeted:

5. Briefly describe the situation:

6. What will happen if the intervention is not executed?

7. What is the solution to the situation?

8. Why is this deemed a crisis situation?

9. How will the funds be used? (Provide a simple budget):

10. What is the time frame of the intervention? (to-from):

11. Total cost of project:

12. Amount requested from PASA:

13. Other funding sources:

14. Other organizations/partners involved:

By submitting this application, the PASA member sanctuary acknowledges, understands and agrees that PASA may, at its discretion, publicize the PASA Crisis Fund award recipients, including the name of the sanctuary and project information.
## Annex IV: PASA Research Sample Request Form

### PASA RESEARCH Sample Request Form

<table>
<thead>
<tr>
<th>Project title:</th>
<th></th>
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<tbody>
<tr>
<td>Brief outline:</td>
<td></td>
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</table>

How will this project benefit the individual or group from which samples are taken?*

<table>
<thead>
<tr>
<th>Primary investigator:</th>
<th>Contact person:</th>
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<td></td>
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Contact’s telephone number:  

<table>
<thead>
<tr>
<th>Contact’s email address:</th>
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Estimated project completion date:  

<table>
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<tr>
<th>Type of protocol? (Samples from living specimens only, samples from both living and dead, necropsy only)</th>
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Shipping address:  

<table>
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<tr>
<th>Shipping protocol:</th>
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Sample collection and handling protocols:  

<table>
<thead>
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<th>Species list:</th>
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</table>
* Please Note

If the request is approved, PASA sanctuaries can only supply samples opportunistically. In order to comply with the PASA Research Policy and the BIAZA Research Guidelines (www.pasaprimates.org; www.biaza.org.uk) PASA requires justification of any samples taken from live animals detailing how the provision of these samples will provide information for the direct benefit of the animal concerned or its group. Supplied samples, which will remain the property of the PASA sanctuaries and/or their respective Governments, should not be used for any other purpose than as described in this form, nor should they ever be used for commercial purposes. Please note that sample sizes will also be limited to amounts held and any research sample can only be a small proportion of that taken for diagnostic purposes.

After registering, researchers are bound by the terms and conditions of the PASA Research Policy.

By signing this Sample Request Form, researchers accept the terms and conditions of the PASA Research Policy, and agree to provide the sanctuaries involved and PASA with an electronic copy and a hard copy of the findings or project report. Or, for ongoing studies, an annual update, should samples be provided by PASA and/or its member sanctuaries.

Researcher’s signature........................................Date.......................................
Annex V: PASA Filming Protocol

The following information is presented to facilitate and guide the negotiation process with media companies, and was designed in partnership with the Great Ape Film Initiative (GAFI) and Nutshell Productions.

Stage 1: Preparation/pre-filming

- Assess whether the film/series has the kind of content you wish to be associated with;
- Assess the requirements of the film crew/media team i.e., what do they want, for how long, who do they need to contribute/interview, what else do they need (especially with reference to community involvement or filming outside of the main remit of the sanctuary program);
- Clarify and confirm dates, logistics, and personnel they need;
- Confirm the channel, program or network the series/film will be shown on;
- Negotiate a contract that both parties agree upon and sign.

Stage 2: Preparation/pre-production

- Agree on a budget based upon the requirements and time-span; a base line of USD $7,000 to USD $10,000 per week is generally acceptable but this could go up if the production requires extra work or it could come down if the production is with the sanctuary for 3 or more weeks. It should never go below USD $7,000 per week and it depends on the final output of the film; a feature film would be a lot more;

  - Among the items to consider as part of this agreement are:
    - Filming permission to film your sanctuary;
    - Filming permission to film your staff;
    - X amount of time for coordination with production team before filming (this will include any coordination with local communities for filming);
    - X amount of time for you during filming;
    - X amount of time for your staff during filming;
    - X amount for accommodation and food;
    - X amount for vehicles, fuel and logistics;
    - X amount for anything else; office support etc., they will use; film permit (if required).

  - The contract/agreement must state that the fee is for this one series/program only and if the footage is used in the future then a further fee has to be negotiated. The sanctuary is not only providing logistics but access to knowledge, practice and research accumulated over many years so this is what is being paid for;
  - Any further sale or distribution via another medium (DVD, book, etc.) requires a separate fee and must be negotiated;
  - Every sanctuary needs to establish its own criteria for terms and conditions especially around the protection of the animals, any sensitive research, damage to property, which should be included in the contract;
  - The sanctuary should request that it receives a minimum two copies of the film and the right to share the film to raise awareness and funds for the sanctuary;
  - A 50% deposit on all agreed fees must be delivered to the sanctuary/bank prior to the start of filming, with the remaining 50% to be paid within 30 days of completion of filming.
Stage 3: Production/filming

- No work is to start or film crew to arrive without the contract being signed and the deposit paid up-front; these fees are also non-returnable if the crew does not arrive as a lot of coordination work will have taken place beforehand.

Stage 4: Production/post-production

- Request a credit or acknowledgement regarding where the film is taking place in the footage (it can be by filming the sanctuary sign, in voice-over, etc.);
- Request a sanctuary credit at the end of the film, a PASA credit at the end of the film, and the listing of both organizations’ websites;
- Request that both the sanctuary website and PASA website be linked from any network or production company website for the program;

Several items, although desirable, will not be granted and are not worth considering in terms of a contract. These include:

- Control of the final product;
- Control of the final edit;
- Control of re-sale;
- Control of narrative;
- Ownership of unused footage.
Annex VI: Guidelines for inspection team

Pre-inspection:
- Inspectors are expected to be well informed with the contents of the PASA Operations Manual and PASA Standards;
- Inspectors are expected to read the materials of the applicant institution that is sent to them by the PEO well before the inspection mission;
- Inspectors should organize travel and accommodation with the applicant although the PEO must be kept informed of all arrangements;
- Inspectors are responsible for consulting with the relevant authorities to confirm if it is safe to travel to the country in question (this should also be reassessed immediately prior to departure), arrange a visa if one is needed, insurance, etc.
- Inspectors should coordinate the mission with the applicant to ensure that costs are kept to a minimum;
- Inspectors should receive agreement from the applicant to the specified costs in advance of travel;
- The PEO should be provided with an estimate of costs to be incurred;
- If there is more than one inspector, PASA will designate a lead inspector;
- Inspectors will be provided with an Inspection Accreditation Questionnaire.

Inspection: generic considerations
- Inspectors are expected to be objective during the inspection process;
- Inspectors are expected to become informed on relevant national legislation;
- Inspectors should start by explaining inspection process to the director/staff of the facility;
- Inspectors should observe the facility (including off-site areas such as food storage and preparation, quarantine, vet clinic). During the tour, relevant staff should accompany the inspectors to answer any questions;
- Interviews with key staff are important. Staff interviews should be conducted in private, without the presence of other staff and/or supervisors. If the number of keeper staff at an institution is too large to allow for individual interviews, inspectors should speak with keeper staff as a group and encourage them to speak confidentially;
- Inspectors should meet with relevant staff members to discuss matters that could not be observed during the tour (e.g. conservation efforts, environmental education and research activities, veterinary and safety procedures, record keeping and master/future plans);
- Inspectors should take an unaccompanied tour of the facility (if possible) and also shadow staff in their daily routine activities;
- Individual staff should be sought out when touring the facility and questions asked;
- It is extremely important that inspectors take photographs and that the photographs present an accurate overview of the physical institution as it exists. Photographs should include all parts of the institution, both the positive and problem areas (if any). The photos should be included in (or attached with) the Inspection Report. These pictures should be preferably taken with a digital camera so they can be easily forwarded by e-mail and potentially posted on the PASA website;
- While future plans should be considered in a general sense, the facility must be judged on what exists at the time of the inspection and not on what is planned for the future;
- After the inspection, inspectors should meet with the director and relevant staff to discuss matters that may need clarification;
- The AC relies on the inspectors to provide a clear picture of the facility and therefore the report should include both positive and negative (if any) observations;
It is not within the remit of inspectors to inform the facility if they are successful in their application, however, they may provide some indication of areas that are obviously in need of improvement;

If the applicant asks the inspectors for ideas on any problems, they may offer their opinion but it should be clearly stated that it is their opinion based on their knowledge and experience, and should not be considered as a recommendation of PASA per se;

Inspectors should ensure that the questionnaire is completed in full. The final version submitted to the PEO should be type written;

Inspectors should keep detailed records of all expenses incurred with receipts;

Preferably all in-country financial matters should be directly taken care of by the applicant institution. However, PASA will reimburse the inspectors for other costs and invoice the applicant institution.

**Inspection: specific considerations**

When evaluating a facility, inspectors should consider the definition of a PASA sanctuary:

“A PASA member sanctuary provides a safe and secure home for African apes and other primates in need. The welfare of the individual and the preservation of the species are of prime importance and are considered equally. The sanctuary operates in the context of an integrated approach to conservation, which can include rehabilitation and re-introduction”.

The following are the main areas of primary focus for evaluating a facility:

**1. Sanctuary management and general operations:**

Inspectors should:

*General management*

- Determine if the institution has a strategic and/or master plan to guide the institution in its development. Examine any strategic and management plans;
- Ask what other programs are being developed or are already in place, and determine if they are on schedule, being followed, etc.
- Check if actual management practices are in line with PASA’s policies including: animal acquisition, housing/husbandry, propagation, euthanasia and release/re-introduction;
- Determine if the facility has animal contact activities: review sanctuary policy for animal and public safety, and view the animals, and public contact areas;
- Attempt to view the facilities from the public’s perspective. Are the buildings and grounds well kept? Are trash receptacles and trash collection sufficient?

*Safety and security*

- Check if the security program employed is sufficient to provide appropriate protection for the animal collection, its employees, and the visiting public;
- Check if procedures are in place to reduce the risk of injury by potentially dangerous animals. Review any emergency procedures;
- Check if facilities that maintain collections of venomous animals have an appropriate supply of sera available and that there are policies/procedures in place for the safe handling of those animals;
- Determine when the most recent escaped animal drill was conducted;
- Determine if escape procedures are posted in animal backup areas and if staff understand safety and escape procedures;
- Review the files on the most recent safety incidents (i.e., escapes, accidents, injuries, attacks, public problems);
- Determine if the exhibits are safe for the animals, the staff and the public;
Verify that adequate security is provided for the animal collection both day and night;
Determine that any fencing (exhibit and perimeter) is intact and in good condition.

**Financial information**
- Determine solvency of the facility and review the availability of long-term funding, contingency plans, emergency funds, financial records.

**Governing authority**
- Determine the levels of control on the part of the governing authority (appropriate or inappropriate);
- Determine the governing authorities role in the day-to-day management of the institution, including staff and programs;
- Evaluate the relationship between the governing authority and the Director.

**Staffing**
- Determine if the facility is maintaining a staff sufficient in qualification and number; a key element of an institution’s successful operation is getting this balance right. Effective communication, working relationships, and training are also important;
- Become familiar with the qualifications of staff and review job descriptions;
- Randomly talk to staff about their responsibilities;
- Discuss with management its relationship with staff, including problems and proposed solutions;
- Discuss with individual staff their relationship with senior management, including problems (make certain to assure confidentiality of statements made);
- Meet with keeper staff individually, if possible, but in cases of very large institutions, meet in one large group without management present, and discuss relationship with management, including problems (make certain to assure confidentiality of statements made);
- Evaluate staff training for detail, frequency, appropriateness;
- Determine if appropriate support is available for staff travel and participation in PASA meetings and training;
- Determine if the facility has a volunteer program, and does this work?

**Support organization**
- Ask the Director about the support organization (and/or board, committee), and its relationship with the facility;
- If no support organization exists, consider whether having one might be helpful.

### 2. Captive primate management:

Close attention should be paid to the size and nature of the captive environments. Inspectors should be careful to note whether the physical and psychological well-being of the animals are being met. Inspectors should:
- View the entire animal collection including those not located at the main site;
- Examine all animal facilities, including those not located on site;
- Randomly select animal records to verify up-to-date status;
- Ensure that animal diets are of a quality and quantity suitable for each animal’s nutritional and psychological needs. Examine animal diets, food coolers, freezers, etc;
- Look for signs of pests and determine what kind of pest control solutions are being utilised;
- Check if animals are provided with sufficient shade and shelter in outdoor exhibits;
- Check if there is adequate ventilation and light in buildings and holding areas;
- Check if animals have access to water (method of delivery and frequency);
Check if species are maintained in numbers sufficient to meet their social and behavioural needs;
Check if there is appropriate enrichment on a regular and frequent basis;
Check if enclosures are of sufficient size and nature to provide for the psychological and physical well-being of each species;
Review the maintenance program, storage, and equipment. How do the overall grounds look?
Consider the overall condition, suitability, and appearance of exhibits. Are they in good condition? Do they represent modern captive practices and philosophies?
Check if the animal facilities meet or exceed all relevant standards;
Ascertain if the facility is engaged in re-introduction, and if so, examine their re-introduction policy and actual re-introduction management practice.

3. Veterinary and human health and welfare:
The facility animal health care program must be under the direction (on-site or remotely) of a suitably qualified veterinarian; an appropriate number of persons must be employed in the animal health care program; and the extent of professional services provided must be judged adequate for that particular facility. Inspectors should:
- Determine if the institution follows the guidelines of the PASA Operations Manual and Veterinary Healthcare Manual;
- Check the animal record-keeping system - is it adequate and current? Randomly pull medical records for review;
- Determine if the animal health care program is sufficiently staffed;
- Determine if the extent of veterinary services provided for the collection is sufficient;
- Evaluate quarantine procedures and their implementation;
- Check emergency procedures; ask random staff the procedure for retrieving an escaped animal;
- Review drug emergency protocol (locked areas, authorized staff, etc.)
- Confirm that policies and procedures for handling venomous animals are adequate;
- Check health care policy and program for sanctuary staff.

4. Conservation education and environmental communication:
Education must be an element in the mission of the facility, and all institutions must have an education program fit for purpose. Inspectors should:
- Review the number and experience of staff dedicated to, and/or involved with education programming;
- Find out how the education message is conveyed to the casual visitor;
- Examine publications, brochures, or other printed material;
- View any teaching areas;
- Explore the availability of funds allocated for education programs;
- Check to see that exhibit signage and graphics contain appropriate information and are in good condition;
- Determine what level of outreach programming exists;
- If animals are being used in off-site situations, review the program to determine if it is appropriate;
- Determine staff development and support for education programs;
- Determine who develops and designs the facility’s educational program and materials.

5. Other program/activities:
Inspectors should:
- Review the scope of the institution’s participation in conservation and law enforcement activities;
- Determine participation in field conservation programs;
- Ask what efforts are undertaken for energy and natural resource conservation (i.e., recycling, water conservation initiatives, etc.);
- Determine the scope of the institution’s research program, and ascertain if it complies with PASA’s Research Policy;
- Review the protocol for evaluating potential research projects;
- Explore how research is viewed by staff;
- Verify if research information is published in appropriate journals;
- Determine the level of involvement with local academia/experts.

Post-inspection:
- The inspector/s must complete the provided questionnaire which concludes with a recommendation on membership to the AC;
- The lead inspector is responsible for completing the questionnaire and for incorporating comments from other inspectors;
- The submitted questionnaire should be type written;
- The questionnaire and any other supporting information should be submitted to the PEO within two weeks of returning from the mission;
- Inspectors may be requested to provide additional information or clarification by the PEO and/or AC;
- Expenses overview and receipts must be submitted to the PEO as soon as possible after returning from the mission.
Annex VII: Time frame and procedure of accreditation process

Application request (Received by PEO) → 2 weeks → Information package (Sent by PEO) → Application package + administration fee (Received by PEO) → 4 weeks → Pre-screening process starts → Review of application by PEO (Request for clarification/additional information) → 4 weeks → Pre-Screening of application (By PASA AC + PEO) → Sanctuary member application

Sanctuary member application → Negative Outcome → 2 weeks → Inform applicant → Positive Outcome → Inform applicant
Add to inspection mission waiting list

- **1-6 months**
  - Selection of inspector/s

- **2 weeks**
  - Correspondence with inspector/s

- **1 month**
  - Arrangements for mission (date, travel, lodging, information for inspector/s & sanctuary)

  - On-site inspection

  - Expenses reimbursed from applicant sanctuary to inspector/s

  - Report prepared by inspector/s

- **2 weeks**

  - Decision on membership by PASA Advisory Council

    - Negative outcome
      - Inform applicant
      - Membership denied

    - Positive outcome
      - Inform applicant
      - Grant sanctuary membership
Annex VIII: Application form for sanctuary membership

PASA SANCTUARY MEMBERSHIP Application Form

Please read the PASA Operations Manual before completing this form. In submitting this application form the applicant agrees that the information provided is true and accurate. This form should be completed electronically. Please use as much space as necessary to answer the questions in full. For questions where more than one option is presented, please indicate those that are appropriate by placing an X in the space [ ] provided.

Sanctuary information:

Application category (please indicate as appropriate):

1. New applying member
2. Reapplying member
3. Suspended member reapplying
4. Other (please describe)

1 Name of sanctuary:

2 Contact details of sanctuary (physical/postal address, email, telephone, fax, website):

3 Name and position of person submitting the application:

Sanctuary management:

4 What is the species focus of your facility?
   (a) single species [ ]
   (b) multi-species [ ]

5 What is the main management focus of your facility?
   (a) rehabilitation and long-term captive care and/or [ ]
   (b) re-introduction [ ]
   (c) species conservation [ ]
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>(d) habitat conservation/management [  ]</td>
<td>(e) environmental management [  ]</td>
</tr>
<tr>
<td>(f) law enforcement [  ]</td>
<td>(g) conservation/environmental education [  ]</td>
</tr>
<tr>
<td>(h) other [  ] please describe</td>
<td></td>
</tr>
</tbody>
</table>

6 What is the legal tenure of your site/s?  
(a) former/ present government facility [  ]  
(b) private land [  ]  
(c) community managed land [  ]  
(d) protected area: full or partial (please describe) [  ]

7 What government agencies/ministries do you work with?  
   |

8 Select the best description of your legal status:  
(a) Locally registered non-profit [  ]  
(b) Internationally registered non-profit (specify which country) [  ]  
(c) Private foundation [  ]  
(d) Private company [  ]  
(e) Other (please describe) [  ]

9 Describe how your organization is governed, i.e., board of directors, trustees, members, owners and provide details of members of the board/executive:  
   |

10 Do you have a support organization? If yes, please name and describe nature of the relationship and support:  
   |

11 Who owns the following within your institution?  
   (a) Buildings  
   (b) Grounds
<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>12</td>
<td>Is your facility open to the public? If yes, please state how many days and hours: Please estimate annual visitation rates for each of the past 5 years:</td>
</tr>
<tr>
<td>13</td>
<td>Describe visitor services available in your sanctuary:</td>
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<tr>
<td></td>
<td>(a) Day visitor services</td>
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<td></td>
<td>(b) Overnight visitor services i.e., lodge</td>
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<td></td>
<td>(c) Toilets</td>
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<td></td>
<td>(d) Gift shop</td>
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<td>(e) Restaurant</td>
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<tr>
<td></td>
<td>(f) Other, please describe</td>
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<tr>
<td>14</td>
<td>What is the minimum distance between visitors and the animals?</td>
</tr>
<tr>
<td>15</td>
<td>Do you allow contact between non sanctuary personnel and animals? Describe:</td>
</tr>
<tr>
<td>16</td>
<td>Do you maintain administrative records i.e. budgets, ledger sheets, staff personnel files? If so, please describe. Are duplicates kept at a different location?</td>
</tr>
<tr>
<td>17</td>
<td>What is your sanctuary location?</td>
</tr>
<tr>
<td></td>
<td>(a) urban [ ]</td>
</tr>
<tr>
<td></td>
<td>(b) rural [ ]</td>
</tr>
<tr>
<td></td>
<td>(c) wilderness [ ]</td>
</tr>
</tbody>
</table>

Sanctuary location:

If you have marked (b) or (c) please indicate name and distance of closest large city:
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<tr>
<td><strong>Do you have more than one site? If so how many? Describe the various site functions and distances from each other:</strong></td>
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<tr>
<td><strong>Sanctuary finance:</strong></td>
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<tr>
<td>18</td>
<td>Please state your annual budget for each of the past 5 years:</td>
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<td>19</td>
<td>Describe your fundraising strategies and projected annual budget for each of the next 5 years:</td>
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<td>20</td>
<td>Please list five major donors that support your program:</td>
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<tr>
<td><strong>Sanctuary personnel:</strong></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Please indicate the number of staff employed by your institution:</td>
</tr>
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<td>22</td>
<td>Please indicate the number of staff against each position, and contract type (i.e., fulltime, part-time, temporary):</td>
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<td></td>
<td>Please submit an organizational chart of your institution if available</td>
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<td>Total:</td>
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<td></td>
<td>Paid:</td>
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<td></td>
<td>Voluntary:</td>
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<td></td>
<td>(a) Management</td>
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<td></td>
<td>(b) Veterinarians</td>
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<td></td>
<td>(c) Vet technicians</td>
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<td></td>
<td>(d) Animal keepers</td>
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<td></td>
<td>(e) Educators</td>
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<td>(f) Administration</td>
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<td></td>
<td>(g) Researchers</td>
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<td></td>
<td>(h) Logisticians</td>
</tr>
<tr>
<td></td>
<td>(i) Eco Guards</td>
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<td></td>
<td>(j) Security Guards</td>
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<td></td>
<td>(k) Maintenance</td>
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<td></td>
<td>(l) Gardeners</td>
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<td></td>
<td>(m) Drivers</td>
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<td></td>
<td>(n) Others: please describe</td>
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<td>23</td>
<td>Please indicate the number of staff that are expatriates:</td>
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<tr>
<td>24</td>
<td>Do you have a volunteer program (formal or informal)? If so, please summarize (role of volunteers, training, fees, duration etc):</td>
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<td>25</td>
<td>Do you have a staff development policy? If yes, please summarize your staff development activities for the past 5 years:</td>
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<tr>
<td></td>
<td><strong>Animal management and husbandry:</strong></td>
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<tr>
<td>26</td>
<td>Do you maintain animal records? If so please describe information recorded. Please complete the provided animal list</td>
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<tr>
<td>27</td>
<td>How many new animals have arrived in the past 12 months?</td>
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<td>Question</td>
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<td>28</td>
<td>What is your present maximum carrying capacity for each species? Describe:</td>
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<td>29</td>
<td>How is the animal care/keeper team and or monitoring team structured i.e., who makes the decisions, responsibilities?</td>
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<td>30</td>
<td>Describe the normal routine of the keepers/animal care team (i.e., start time, number of feeds per day, cleaning, management and repair of enclosures):</td>
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<td></td>
<td>If this varies according to species or type of confinement, please describe:</td>
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<tr>
<td>31</td>
<td>If your animals are free-ranging, is there a post-release monitoring team and what is their routine?</td>
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<td></td>
<td>Is telemetry used? Please describe:</td>
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<td>Is data collected? Please describe:</td>
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<td>Question</td>
<td>Answer</td>
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<tr>
<td>Have the data been externally published?</td>
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<td>Please list:</td>
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<tr>
<td>32 Please submit detailed list of group composition (age/sex ratios),</td>
<td></td>
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<tr>
<td>including type and size of housing for each group:</td>
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<tr>
<td>33 How are decisions made about husbandry, group changes, integration,</td>
<td></td>
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<tr>
<td>and the movement of animals to other facilities?</td>
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<tr>
<td>34 Is there a breeding management plan or any contraception practiced?</td>
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<tr>
<td>If yes, please provide details on species included and methods used:</td>
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<tr>
<td>35 How is fresh water provided, and how often?</td>
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<tr>
<td><strong>Animal enclosures</strong></td>
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<tr>
<td>36 Who designs and builds the animal enclosures?</td>
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<tr>
<td>37 How are animals contained? i.e., cages, fenced enclosures, islands</td>
<td></td>
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<tr>
<td>(describe holding facilities, indoor/ outdoor areas):</td>
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<tr>
<td>38 What is the size and carrying capacity of the enclosed areas?</td>
<td></td>
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<tr>
<td>(include islands and continuous forest)</td>
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<tr>
<td>39 Do you have any of your own regulations for minimum cage size for</td>
<td></td>
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<tr>
<td>particular age, maximum number of animals for particular size cage?</td>
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<td>Question</td>
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</tr>
<tr>
<td>40</td>
<td>If you animals are free-ranging who is responsible for release site selection? What data are collected to support the decision-making process? Describe: Have these data been externally published?</td>
</tr>
<tr>
<td>41</td>
<td>Do you have an enrichment program and if so, please summarize:</td>
</tr>
<tr>
<td>42</td>
<td>How is repair work managed (i.e., who monitors/authorizes the repairs)?</td>
</tr>
<tr>
<td>43</td>
<td>Who decides what the animals should be fed?</td>
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<tr>
<td>44</td>
<td>Are the animal diets recorded (i.e., written diet sheets?) Please provide a copy of your standard diet sheet</td>
</tr>
<tr>
<td>45</td>
<td>Please summarize your feeding protocol for infant primates:</td>
</tr>
<tr>
<td>46</td>
<td>What proportion of food provided is domestic versus wild?</td>
</tr>
<tr>
<td>47</td>
<td>Do you have any feeding enrichment devices or programs? Describe:</td>
</tr>
<tr>
<td>48</td>
<td>If your animals live on islands, are they nutritionally self-sufficient?</td>
</tr>
<tr>
<td>49</td>
<td>If your animals are re-introduced, are they nutritionally self-sufficient?</td>
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<tr>
<td>50</td>
<td>Can each animal be permanently identified? Describe method/s employed i.e., micro chip, tattoo, photo, collar, physical markings etc:</td>
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<tr>
<td>51</td>
<td>What medical records do you keep?</td>
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<tr>
<td>52</td>
<td>How are disease issues audited? Do you have regular review meetings? If so, who is involved and how often are they undertaken?</td>
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<tr>
<td>53</td>
<td>Can you get medical tests performed (i.e., haematology, biochemistry, parasitology) as and when required?</td>
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</tr>
<tr>
<td>54</td>
<td>Can you get virology/serology performed as and when required?</td>
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<tr>
<td>55</td>
<td>Are necropsies performed on all animals that die? If not, what proportion undergo necropsy and how do you determine which do/do not?</td>
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<td></td>
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<tr>
<td>56</td>
<td>Are necropsies performed on site or at another facility? Are records of all post-mortem examinations kept on file?</td>
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<td></td>
<td>Question</td>
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<tr>
<td>57</td>
<td>Are tissues examined histologically? If so, is this done on site or at another facility? How often is this done?</td>
</tr>
<tr>
<td>58</td>
<td>Are other diagnostic techniques used routinely? Describe:</td>
</tr>
<tr>
<td></td>
<td><strong>Health screening</strong></td>
</tr>
<tr>
<td>59</td>
<td>How are health problems brought to attention i.e., daily rounds by who? Who prioritizes what needs to be done?</td>
</tr>
<tr>
<td>60</td>
<td>Do you employ a full-time veterinarian? If no, please describe how veterinary care is provided:</td>
</tr>
<tr>
<td>61</td>
<td>What is the daily routine of the veterinary department?</td>
</tr>
<tr>
<td>62</td>
<td>Do you perform routine physical examinations on any of your animals? If so, which species and how often?</td>
</tr>
<tr>
<td>63</td>
<td>Do you have a program of screening your animals for specific diseases?</td>
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<tr>
<td></td>
<td>If so, what how do you determine which diseases you screen for? (i.e., government requirements or because it has been identified as a significant cause of death by looking at necropsy results etc)</td>
</tr>
<tr>
<td>64</td>
<td>Please provide a list of the diseases you routinely look for in each species:</td>
</tr>
<tr>
<td>65</td>
<td>If you are engaged in re-introduction, what diseases do you screen for pre-release, and is there any post-release health monitoring?</td>
</tr>
</tbody>
</table>

**Disease control program (including vaccination and parasite control)**

| 66 | Do you monitor your animals for endo-parasites? If so by what method and how frequently? |

| 67 | Do you give any routine parasite treatments to your animals? |

If so what drugs do you use in which species and how do you administer these?

How do you decide how frequently you should treat the animals?
| 68 | What is your vaccination program? Describe: |
| 69 | Do you have a disease contingency plan for high risk disease in place? |

**Therapeutics**

| 70 | Do you have capture equipment on premises? Please describe: |
| 71 | Do you have trained staff on site at all times who can use the equipment? Describe: |
| 72 | Do you have specialized animal handling facilities allowing direct contact i.e., ability to inject animals by hand? |

**Quarantine/bio-security/vermin control/employee health screening**

<p>| 73 | Do newly acquired animals get quarantined from the rest of the animals in your care? If so, for how long? What diseases are screened for during this period? |
| 74 | How do you prevent disease spreading around the facility or from animals in quarantine? What hygienic measures are taken? |
| 75 | How do you prevent disease entering the facility: |
| • | In food or water? |</p>
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>With staff/visitors?</td>
<td></td>
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<tr>
<td>On bedding?</td>
<td></td>
</tr>
<tr>
<td>With wild birds/rodents?</td>
<td></td>
</tr>
<tr>
<td><strong>76</strong> Do you have an employee preventative health program? Please summarize:</td>
<td></td>
</tr>
<tr>
<td><strong>Security and safety</strong></td>
<td></td>
</tr>
<tr>
<td>Does your sanctuary have written procedures for emergencies i.e., for animal escapes/attacks, fire, flood, civil unrest etc?</td>
<td>If yes, please provide a copy</td>
</tr>
<tr>
<td>Have there been any major injuries or deaths caused by dangerous animals in the last five years?</td>
<td>If yes, please provide a brief description of the event</td>
</tr>
<tr>
<td>Have there been any major escapes in the past five years requiring darting?</td>
<td>If yes, please briefly describe the event, actions and changes to procedures or facilities to prevent future incidences</td>
</tr>
<tr>
<td>Are all staff members provided with regular training in all emergency procedures?</td>
<td></td>
</tr>
<tr>
<td>Do you provide employees and volunteers who handle animals with training/information on common issues/events?</td>
<td></td>
</tr>
<tr>
<td>Does your sanctuary have a perimeter fence that is independent of all animal enclosures?</td>
<td></td>
</tr>
<tr>
<td><strong>Education program</strong></td>
<td></td>
</tr>
<tr>
<td>Please summarize the key elements of your education program (include on- and off-site activities):</td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>Answer</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Who designs the education program?</td>
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<tr>
<td>What educational materials are used?</td>
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<tr>
<td>Who are the target audiences?</td>
<td></td>
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<tr>
<td>What are the key education messages asking people to do? Please summarize:</td>
<td></td>
</tr>
<tr>
<td>Is the education program evaluated? If yes, please summarize the method of evaluation and how often it occurs?</td>
<td></td>
</tr>
<tr>
<td>Law enforcement</td>
<td></td>
</tr>
<tr>
<td>Does your sanctuary facilitate law enforcement?</td>
<td>If yes, please provide a brief description of your activities i.e., investigation, confiscation, judicial process etc.</td>
</tr>
<tr>
<td>Re-introduction</td>
<td></td>
</tr>
<tr>
<td>If you are already engaged in re-introduction, please identify species/numbers/sex/age released, and their status:</td>
<td></td>
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<tr>
<td>If you are planning to re-introduce, please describe where you are in</td>
<td></td>
</tr>
</tbody>
</table>
the process (identify species, indicate numbers/sex/age to be released if known) and projected timetable:

| 91 | Have you had any accidental releases? | If yes, please detail numbers, species and outcome i.e., returned or not returned etc. |

Community development

| 92 | Is your sanctuary involved in community development program? | If yes, please summarize |

The application form should be completed electronically and be accompanied by the following supporting documents:

1. Copies of any documents confirming your legal status
2. 1-2 page summary of your institution’s history. This should include the date founded and opened, rationale for facility development, dates of major events, master-plan, description of facility size, list of new facilities/capital improvements undertaken in the last five years and a brief description of any major projects planned for the next five years.
3. Copy of mission statement and if available the strategic/management plan
4. Standard Operating Procedures Manual if available
5. Organizational chart of institution if available
6. Animal list (please complete the excel spreadsheet provided)
7. List of group composition (age/sex ratios), including type and size of housing for each group
8. Copy of standard diet sheet if available
9. Procedures for emergencies if available
10. Current annual report if available
## Annex IX: Example of the PASA Animal List

(to be completed on an excel spreadsheet as provided)

<table>
<thead>
<tr>
<th>Permanent ID</th>
<th>Name of animal</th>
<th>Species</th>
<th>Sub-species</th>
<th>Est. DOB</th>
<th>Sex</th>
<th>Date of arrival</th>
<th>Method of arrival</th>
<th>Status pre-sanctuary</th>
<th>Confiscation site</th>
<th>Area of origin (if known)</th>
<th>Legal document available</th>
<th>Present location</th>
<th>Date of Death</th>
<th>Cause of death</th>
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</table>

*Please expand spreadsheet as required*

Method of arrival¹ C=Confiscation; S=Surrendered; T=Transfer; CB=Captive-born; O=Other (please describe)

Status pre-sanctuary² P=Pet; E=Entertainment; Z=Zoo; L=Laboratory; T=In transit; NK=Not Known; O=Other (please describe)
Annex X: Summary of applicant guidelines, obligations and responsibilities

Applicant guidelines:
Before submitting an application to join PASA, potential applicants should read the PASA Operations Manual. Institutions seeking PASA membership are strongly encouraged to consider why they wish to join PASA and whether they are compatible with the very ethos of PASA (Section 3) and compliant with PASA Codes of Conduct, Policies, Operational Philosophy, Principles and Minimum Standards (Sections 3 & 4). It is advisable to discuss the application with the PEO and CEO before submitting a formal application.

Applicant obligations:
The obligations of an applicant towards PASA involve payment of accreditation costs:

- Applicants have to pay an accreditation fee of $500 for Sanctuary Membership to cover administrative costs;
- Applicants have to pay for the screening of their institution (p.74). All costs for travel, accommodation and meals are the responsibility of the institution being assessed (PASA will ensure that travel costs are minimized);
- The annual membership fee is payable within three months of being accepted as a Sanctuary Member.

Applicant responsibilities:
During and after accreditation, the applicant institution has certain responsibilities:

- To complete the accreditation questionnaire and to provide the Inspection team/PEO with all requested information. In submitting an application form the applicant agrees that the information provided is true and accurate;
- To make sure the PEO receives the correct accreditation fee;
- To be cooperative in providing the Inspection team/PEO with extra information or answers to questions;
- To assist the PEO and Inspection team in organising the screening mission (e.g. accommodation, travel);
- To deal with (if possible) all financial matters during the screening mission (e.g. hotels, meals);
- To ensure that, during the screening mission, all relevant staff members are present and available for questions;
- To reimburse the Inspection team with all travel, accommodation and consumption costs not yet paid for;

If accepted as a PASA member, the institution must:

- Adhere to PASA standards and fulfill PASA obligations;
- Pay the annual membership fee of $1000 in a timely manner (this should be paid within the first 3 months of being granted full membership status);
- To provide the PEO with regular updates on developments and progress;

Refer to Sections 6 & 7 in the PASA Operations Manual for more detail
Annex XI: Inspection team questionnaire

Sanctuary information:

<table>
<thead>
<tr>
<th></th>
<th>Name of sanctuary:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Contact details of sanctuary (physical/postal address, email, telephone, fax website):</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Describe sanctuary location:</th>
</tr>
</thead>
</table>

Sanctuary management and operations

<table>
<thead>
<tr>
<th></th>
<th>Is this a single or multi-species facility?</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Is the sanctuary focus one of rehabilitation</th>
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<tbody>
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<tr>
<td>6</td>
<td>Date founded:</td>
</tr>
<tr>
<td>7</td>
<td>Name of founder:</td>
</tr>
<tr>
<td>8</td>
<td>Present day role of founder:</td>
</tr>
<tr>
<td>9</td>
<td>Name of director/manager:</td>
</tr>
<tr>
<td>10</td>
<td>Time served as manager:</td>
</tr>
<tr>
<td>11</td>
<td>What is the legal tenure of the site/s? For example, government, privately, community owned, protected (fully, partially) etc</td>
</tr>
<tr>
<td>12</td>
<td>Formal agreement with government authority? Describe:</td>
</tr>
<tr>
<td>13</td>
<td>Name of national governing authority (ministry/agency):</td>
</tr>
<tr>
<td>14</td>
<td>What is the legal status of the sanctuary i.e., local non-profit, international non-profit (specify country), private foundation, private company etc?</td>
</tr>
<tr>
<td>15</td>
<td>How is the organization governed i.e. board, trustees etc?</td>
</tr>
<tr>
<td>16</td>
<td>Name and describe support organization:</td>
</tr>
<tr>
<td>17</td>
<td>Who owns the buildings, ground and animal collection?</td>
</tr>
<tr>
<td>18</td>
<td>Is facility open to the public? Describe the number of days and hours, the entrance fee, and annual visitation rates for each of the past 5 years: Describe visitor facilities/services:</td>
</tr>
<tr>
<td></td>
<td>Question</td>
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<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>19</td>
<td>What is the minimum distance between visitors and the animals?</td>
</tr>
<tr>
<td>20</td>
<td>Does the sanctuary allow contact between non sanctuary personnel and animals? Describe:</td>
</tr>
<tr>
<td>21</td>
<td>What administrative records (i.e., budgets, ledger sheets, staff personnel files) are maintained and where? Duplicates?</td>
</tr>
<tr>
<td>22</td>
<td>If the sanctuary is involved in data collection, has it published externally? Please list:</td>
</tr>
<tr>
<td></td>
<td><strong>Sanctuary finances</strong></td>
</tr>
<tr>
<td>22</td>
<td>What is the annual budget for each of the previous 5 years?</td>
</tr>
<tr>
<td>23</td>
<td>View financial records for the previous 3-5 years</td>
</tr>
<tr>
<td>24</td>
<td>What are the fundraising strategies and projected annual budgets for each of the next 5 years?</td>
</tr>
<tr>
<td></td>
<td><strong>Sanctuary personnel</strong></td>
</tr>
<tr>
<td>25</td>
<td>Obtain a list of all staff, including nationalities and responsibilities</td>
</tr>
<tr>
<td>26</td>
<td>View examples of personnel records</td>
</tr>
<tr>
<td>27</td>
<td>Summarize the organizational structure of the sanctuary:</td>
</tr>
<tr>
<td></td>
<td>Summarize the volunteer program (role of volunteers, training, fees, duration etc):</td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------------------------------------------------------------</td>
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<tr>
<td></td>
<td>View evidence of staff training and development. Summarize:</td>
</tr>
</tbody>
</table>

**Animal management and husbandry**

<table>
<thead>
<tr>
<th></th>
<th>Review stock sheet - is it generally accurate?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>View animal records Viewed/not viewed?</td>
</tr>
<tr>
<td></td>
<td>How do animals come to be at the sanctuary i.e., confiscated, surrendered, transfer, captive-born?</td>
</tr>
<tr>
<td></td>
<td>How many new animals have arrived in the past 12 months?</td>
</tr>
<tr>
<td></td>
<td>What is the maximum carrying capacity for each species?</td>
</tr>
<tr>
<td></td>
<td>How is the animal care/keeper team and or monitoring team structured i.e., who makes the decisions, responsibilities?</td>
</tr>
<tr>
<td></td>
<td>What is the normal routine of the keepers/animal care team? (i.e., start time, number of feeds per</td>
</tr>
</tbody>
</table>
| 37 | If animals are free-ranging, is there a post-release monitoring team and what is their routine?  
Is telemetry used?  
Are data collected? Describe:  
Are data published externally? |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>38</td>
<td>Check list of group composition provided in application – is it accurate?</td>
</tr>
<tr>
<td>39</td>
<td>Are species kept in appropriate social groupings?</td>
</tr>
<tr>
<td>40</td>
<td>How are decisions made about husbandry, group changes, integration, and the movement of animals to other facilities?</td>
</tr>
<tr>
<td>41</td>
<td>Is there a breeding management plan or any contraception practiced? Detail species included and methods used:</td>
</tr>
<tr>
<td>42</td>
<td>How is fresh water provided, and how often?</td>
</tr>
</tbody>
</table>
### Animal enclosures

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>43 Who designs and builds the animal enclosures?</td>
<td></td>
</tr>
<tr>
<td>44 How are animals contained? i.e., cages, fenced enclosures, islands etc (indicate which has indoor/outdoor facilities)</td>
<td></td>
</tr>
<tr>
<td>45 What is the size and carrying capacity of the enclosed areas? (include islands and continuous forest)</td>
<td></td>
</tr>
<tr>
<td>46 Does the sanctuary have any of its own regulations for minimum cage size for different species/age, or maximum number of animals for particular size cage?</td>
<td></td>
</tr>
<tr>
<td>47 Who is responsible for developing and monitoring enrichment?</td>
<td></td>
</tr>
<tr>
<td>Describe evidence of enrichment program:</td>
<td></td>
</tr>
<tr>
<td>48 How is repair work managed (i.e., who monitors/authorizes the repairs), etc?</td>
<td></td>
</tr>
</tbody>
</table>

### Animal nutrition

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>49 Who decides what the animals should be fed?</td>
<td></td>
</tr>
<tr>
<td>50 Are the animal diets all recorded? View diet sheet if available</td>
<td></td>
</tr>
<tr>
<td>51 Are animals’ diets adequate for their needs?</td>
<td></td>
</tr>
<tr>
<td>What is the feeding protocol for infant primates?</td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>Is food used as enrichment?</td>
</tr>
<tr>
<td>53</td>
<td>If animals live on islands, are they nutritionally self-sufficient?</td>
</tr>
<tr>
<td>54</td>
<td>If animals are reintroduced, are they nutritionally self-sufficient?</td>
</tr>
</tbody>
</table>

**Animal identification**

| 55 | Can each animal be permanently identified? |
|    | Describe method/s employed i.e., microchip, tattoo, photo, collar, physical markings etc: |

**Medical records**

| 56 | What medical records are maintained? View medical records. Can they track the medical history of any one individual or are these filed by groups? |
| 57 | Can records be searched easily? (i.e., to review all cases of enteritis in previous 5yrs or to identify the types and frequency of disease in any one species over the last 5yrs) |
| 58 | How are disease issues audited? Do they have regular review meetings? If so who is involved and how often are they undertaken? |
### Laboratory diagnostic techniques including necropsies

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>59 Can medical tests such as haematology, biochemistry and parasitology be performed as and when required?</td>
<td></td>
</tr>
<tr>
<td>60 Can virology/serology be performed as and when required?</td>
<td></td>
</tr>
<tr>
<td>61 Are necropsies performed on all animals that die? If not, what proportion undergo necropsy and how is it determined?</td>
<td></td>
</tr>
<tr>
<td>62 Are necropsies performed on site or at another facility?</td>
<td></td>
</tr>
<tr>
<td>63 Are tissues examined histologically? If so, is this done on site or at another facility? How often is this done?</td>
<td></td>
</tr>
<tr>
<td>64 Are other diagnostic techniques used routinely? Describe:</td>
<td></td>
</tr>
</tbody>
</table>

### Health screening

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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<tbody>
<tr>
<td>65 How are health problems brought to attention i.e., daily rounds by who? Who prioritizes what needs to be done?</td>
<td></td>
</tr>
<tr>
<td>66 Is a full-time vet employed? If not, describe how veterinary care is provided:</td>
<td></td>
</tr>
<tr>
<td>67 How is the veterinary team organized?</td>
<td></td>
</tr>
<tr>
<td>68 What is the daily routine of the vet department?</td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>Details</td>
</tr>
<tr>
<td>----------</td>
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</tr>
<tr>
<td>69</td>
<td>Are routine physical examinations performed on any of the animals? If so, which species and how often?</td>
</tr>
<tr>
<td>70</td>
<td>Is there a program of screening animals for specific diseases? View list of diseases screened in the application form and check if it corresponds</td>
</tr>
<tr>
<td>71</td>
<td>If the applicant engages in reintroduction, what diseases do they screen for pre-release, and is there any post-release health monitoring?</td>
</tr>
<tr>
<td><strong>Disease control program (including vaccination and parasite control)</strong></td>
<td></td>
</tr>
<tr>
<td>72</td>
<td>Do they monitor animals for endo-parasites? If so by what method and how frequently?</td>
</tr>
<tr>
<td>73</td>
<td>Do they give any routine parasite treatments to animals? If so, what drugs are used for which species, and how are they administered?</td>
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<tr>
<td>Question</td>
<td>Answer</td>
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<td>-------------------------------------------------------------------------</td>
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<tr>
<td>How do they decide how frequently to treat the animals?</td>
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</tr>
<tr>
<td><strong>74</strong> What is the vaccination program?</td>
<td></td>
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<tr>
<td><strong>75</strong> What access is there to remote injection equipment? i.e., Dart gun? Blow pipe? Jab stick? Sufficient darts? Availability?</td>
<td></td>
</tr>
<tr>
<td><strong>76</strong> Are trained staff on site at all times able to use the equipment?</td>
<td></td>
</tr>
<tr>
<td><strong>77</strong> Do they have specialized animal handling facilities allowing direct contact i.e., ability to inject animals by hand?</td>
<td></td>
</tr>
<tr>
<td><strong>78</strong> Do newly acquired animals get quarantined from the rest of the animals?</td>
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<tr>
<td>Question</td>
<td>Answer</td>
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<td>------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>If so for how long? What diseases are screened for during this period?</td>
<td></td>
</tr>
<tr>
<td>79 How does the sanctuary prevent disease from spreading around the facility/or from animals in quarantine?</td>
<td></td>
</tr>
<tr>
<td>What hygienic measures are taken?</td>
<td></td>
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<tr>
<td>80 How does the sanctuary prevent disease entering the facility:</td>
<td></td>
</tr>
<tr>
<td>• In food or water?</td>
<td></td>
</tr>
<tr>
<td>• With staff/visitors?</td>
<td></td>
</tr>
<tr>
<td>• On bedding?</td>
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<tr>
<td>• With wild birds/rodents?</td>
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<tr>
<td>81 Is there an employee preventative health program? Please describe:</td>
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</tbody>
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Security and safety

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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<tbody>
<tr>
<td>82 Does the sanctuary have written procedures for emergencies i.e., for</td>
<td></td>
</tr>
<tr>
<td>If a copy was provided in the application, check it corresponds to what is described/what you are shown</td>
<td></td>
</tr>
<tr>
<td>83</td>
<td>Have there been any major injuries or deaths caused by dangerous animals in the last five years?</td>
</tr>
<tr>
<td>84</td>
<td>Have there been any major escapes in the past five years requiring darting?</td>
</tr>
<tr>
<td>85</td>
<td>Are all staff members provided with regular training in all emergency procedures?</td>
</tr>
<tr>
<td>86</td>
<td>Are employees and volunteers who handle animals provided with training/information on common issues/events?</td>
</tr>
<tr>
<td>87</td>
<td>Does the sanctuary have a perimeter fence that is independent of all animal enclosures?</td>
</tr>
</tbody>
</table>

**Education program**

<p>| 88 | Please summarize the key elements of the education program (staffing, onsite/offsite, nature clubs, public visitors, conducted tours, use of media etc): |
| | Who designs the education program? |
| 89 | What educational materials are used? |</p>
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td>Who are the target audiences?</td>
</tr>
<tr>
<td>91</td>
<td>What are the key education messages asking people to do?</td>
</tr>
<tr>
<td>92</td>
<td>Is the education program evaluated? If so, please describe how:</td>
</tr>
<tr>
<td>93</td>
<td>Does the education program promote community engagement? If so, please describe:</td>
</tr>
</tbody>
</table>

**Law enforcement**

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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<tbody>
<tr>
<td>94</td>
<td>Does the sanctuary facilitate law enforcement (i.e., investigation, confiscation, judicial process)? If so please describe:</td>
</tr>
</tbody>
</table>

**Re-introduction**

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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</thead>
<tbody>
<tr>
<td>95</td>
<td>If the sanctuary is re-introducing animals, cross-check and update information provided in application concerning species and numbers/sex/age released and status</td>
</tr>
<tr>
<td>96</td>
<td>If the sanctuary is planning to re-introduce, describe where they are in the process</td>
</tr>
<tr>
<td>97</td>
<td>Has the facility had any accidental releases?</td>
</tr>
<tr>
<td>----</td>
<td>------------------------------------------------</td>
</tr>
</tbody>
</table>

**Community development**

<table>
<thead>
<tr>
<th>98</th>
<th>Is the sanctuary involved in any community development programs? If so please describe:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of inspector:</td>
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</tr>
<tr>
<td>Key contact at sanctuary:</td>
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<tr>
<td>Date of inspection:</td>
<td></td>
<td></td>
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<tr>
<td>Date of form completion:</td>
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<thead>
<tr>
<th>List the name and position of all staff interviewed:</th>
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</table>

<table>
<thead>
<tr>
<th>Recommendation by Inspector to grant Sanctuary Membership to PASA. Yes or no?</th>
</tr>
</thead>
<tbody>
<tr>
<td>If no, please summarize key areas of concern and prioritize areas of action required by the sanctuary for facility compliance:</td>
</tr>
<tr>
<td>Please continue on additional sheet if necessary</td>
</tr>
</tbody>
</table>