



Anegada Iguana, *Cyclura pinguis*
SPECIES RECOVERY PLAN
2006–2010

Updated November 2010



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hosted by the Miami Metro Parks Zoo.

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Foreword & Executive Summary

Collectively, the West Indian iguanas of the genus *Cyclura* represent the single most endangered group of lizards in the world. Many populations have been drastically reduced because their island habitat has been eliminated by human development, or severely impacted by invasive species. Recent IUCN Red List assessments rank five of the existing nine species as Critically Endangered, with a 50% chance of extinction within the next ten years without intensive conservation intervention. Of these five species, the Anegada iguana, *Cyclura pinguis*, is considered the most primitive of the genus, and basal to the remaining eight descendent species. From a genetic diversity standpoint, conserving *C. pinguis* will preserve the greatest amount of evolutionary potential within the genus *Cyclura*. For these reasons the conservation of the Anegada iguana consistently ranks as the top priority for the IUCN/ SSC Iguana Specialist Group (ISG).

Given that *C. pinguis* formerly existed on Puerto Rico according to the fossil record (and there is speculation that it ranged more extensively throughout the Puerto Rican Bank) perhaps a more appropriate name would be the Puerto Rican Bank iguana. Nevertheless the species is now restricted to several small islands in the British Virgin Islands (BVI). Only one of these is considered a 'native' population in that the others are the result of human-mediated introductions. At least four islands in the BVI now support small populations of *C. pinguis*, one of which (Guana) is large enough to be considered biologically significant. However the most important and robust population, not only from a conservation genetics and management perspective but for political reasons as well, is the one living on Anegada. Estimated at 200 – 300 adult iguanas, this population, until recently, consisted primarily of aging adults with minimal recruitment due to feral cat predation on hatchling iguanas. This remnant population survives in a degraded environment with reduced plant diversity due to introduced grazing mammals – goats, cattle, donkeys – that have literally 'torched' the landscape in several key areas.

Biologists began studying the iguana population on Anegada in the 1960s, documenting depleted populations and sounding an early warning for the species' future. Continued population declines were observed in the 1980s and 1990s, with an estimated 80% numerical decline since the late 1960s. By the mid-1990s the species was considered to be at a critical juncture. The ISG, at their organizational meeting in Miami in 1996, recommended a headstarting program aimed at overcoming high juvenile mortality. That program got underway in 1997 and since then over 150 young iguanas have been placed in a headstarting facility on Anegada, built in 1998; hatchlings have been collected for the program every year from 1997 to 2006. Beginning in 2003, repatriation of iguanas back into the wild began, with 24 released per year through 2005, and 29 in 2006, for a total of 101; overall survival has been encouraging, at 86%. Based on habitat use patterns it appears that the environment on Anegada is still below carrying capacity and will likely support a larger wild population. The core iguana habitat, particularly the nesting areas, is concentrated along the north coast of Anegada, at Bones and Windlass Bight. Fortunately suitable iguana habitat extends into the western salt ponds, a designated Ramsar sight. Unfortunately none of these areas is officially protected and numerous land claims have been staked, especially on the coast. This coastal beach and sand dune habitat is considered prime land for tourism and if land use patterns are not carefully controlled in Anegada, anticipated future development could proceed on a collision course with the survival needs of the iguana.

In order to consider the myriad issues that affect the survival of the iguana on Anegada, and to develop a comprehensive strategy to guide future conservation plans, a Species Recovery Plan workshop was held July 2001 at the Botanic Garden in Tortola, BVI. Hosted by the BVI National Parks Trust (NPT), the workshop brought together NPT staff with members of the ISG and other local participants and was facilitated by Mark Day of Flora and Fauna International. Though a range of important topics were identified, and recommendations made, this Plan was not published and became outdated. In April 2004 a group of participants from the ISG and BVI NPT reconvened to revisit and update the Plan, hosted by the Miami Metrozoo. The resulting Species



Recovery Plan, 2006 – 2010, has as the overall goal to *restore a self-sustaining population of Anegada iguanas on the island of Anegada*. The work presented here is outlined under seven broad objectives including invasive species control programs, enhancing effectiveness of the headstart – release program to maximize recruitment, collection of scientific data to aid in the long-term recovery and management of the wild population, protection of sufficient high quality habitat to insure long-term population viability, implementation of a public outreach program using the iguana as a flagship species, securing sufficient financial resources for SRP implementation and ensuring effective program oversight and coordination.

The tasks that lie before us will not be achieved easily or without commitment and dedication from a wide range of individuals and organizations, both internationally and within the BVI. The strength of this process is that such a group already exists, hampered only by the lack of financial resources. Though this program has, over the years, attracted generous support from the conservation donor community and the participating institutions, saving the Anegada iguana on Anegada will require perhaps a twenty-fold increase in funding; the invasive species control program alone is estimated to run into the millions of dollars. It is our genuine hope that this SRP document will sufficiently elevate the visibility of this worthy program so as to inspire funding agencies and the international conservation community to take decisive action. Locally, the resolution of the long-simmering land tenure issue will be a pivotal moment for the iguana on Anegada and the next ten years will likely prove to be the ultimate test of their survival. Will the last native Anegada iguana population persist naturally, or will it become relegated to small privately owned islands in the BVI and elsewhere? Speaking collectively for the ISG we have chosen to pursue the former course and are committed to making a stand on Anegada.

Rick Hudson, Co-Chair
IUCN/SSC Iguana Specialist Group



GLENN GERBER

Anegada Iguana, *Cyclura pinguis*



Acronyms

AZA	American Zoo and Aquarium Association
BVI NPT	British Virgin Islands National Parks Trust
CITES	Convention on the International Trade of Endangered Species of Wild Fauna and Flora
EXCO	Executive Council
GIS	Geographic Information System
GPS	Global Positioning System
IC	Island Conservation
IIF	International Iguana Foundation
IMLS	Institute of Museum and Library Services
IRCF	International Reptile Conservation Foundation
ISG	Iguana Specialist Group
IUCN	International Union for the Conservation of Nature
SDZ	San Diego Zoo
SPARKS	Single Population Analysis & Records Keeping System
SSC	Species Survival Commission
TRAFFIC	The Wildlife Trade Monitoring Network
UKOTCF	United Kingdom Overseas Territories Conservation Forum
USFWS	United States Fish and Wildlife Service
WCS	Wildlife Conservation Society



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Conservation and Management Plan

1 *Species Assessment*

1.1 Protected Status

The Anegada iguana (*Cyclura pinguis*) is listed as Critically Endangered on the IUCN Red List of threatened species. Anegada iguanas are listed on Appendix I of the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES). The United States Fish & Wildlife Service considers the species to be Endangered under the U.S. Endangered Species Act. Nationally, Anegada iguanas are protected under the British Virgin Islands Endangered Species Act and the National Parks and Protected Areas Ordinance.

1.2 Range

The Anegada iguana is recognized as one of the most endangered Caribbean rock iguana species in the genus *Cyclura*. Conservation biologists estimate the current population to be less than 300 animals with near zero recruitment. Wild populations are known to have occurred on Puerto Rico during the late Pleistocene, but the species is believed to have been restricted naturally by climate change to Anegada before the arrival of Amerindians. European settlement of the British Virgin Islands resulted in the introduction of invasive mammalian predators and livestock to Anegada that have markedly accelerated the decline of the species. The natural wild population is now largely restricted to the Bones Bight–Windlass Bight–Western Ponds complex area of Anegada. A population of approximately 100 iguanas was established on Guana Island from eight founders in the 1980s, and small numbers of juveniles from the Guana population were subsequently translocated to Necker, Norman, and Little Thatch Islands.

1.3 Habitat requirements and limiting factors

West Indian iguana species in the genus *Cyclura* evolved within Caribbean dry forest scrub habitats. The Anegada iguana is the largest native terrestrial animal in the British Virgin Islands and also the dominant herbivore. Almost exclusively herbivorous, Anegada iguanas are known to eat 25 plant species, representing 21 plant families. Of these, five, when in fruit, are extremely important seasonal dietary components, indicating that iguanas are highly selective in their food preferences. Iguanas inhabit areas that are regularly interspersed with large trees. In sandy areas these are most often seagrass (*Coccoloba uvifera*), whereas in rocky areas these are most often loblolly (*Pisonia subcordata*). Trees seem to be important for both cover and shade. Iguana retreats are often located beneath trees in both habitats, and in rocky habitats, rock slabs lifted by the growing roots of large trees sometimes provide the only available subterranean cover.

As expected for a territorial and polygynous species, adult males have larger home ranges (and presumably territories) than adult females. There is considerable overlap in home range among animals, but adult males generally have centres of activity that are exclusive of one another (Mitchell 1999). In general, mating occurs in the spring near the end of the dry season. Females excavate tunnels with an egg chamber in sand or soil early in the summer wet season, then eggs incubate over the summer months when temperatures are highest and rainfall is relatively frequent. Juveniles emerge from nests in late summer or early fall when food resources are abundant. Some circumstantial evidence of natal homing exists (Gerber 2000).



1.4 Conservation Issues

Anegada iguanas evolved without large mammalian predators or competitors, and as a result, the principal threats to the survival of Anegada iguanas are predation by introduced mammalian predators, especially cats, competition with introduced mammalian herbivores, especially goats, cattle, and donkeys, and habitat loss and degradation caused by humans. Trampling of burrows by introduced livestock is also a serious concern. No Anegada iguanas exist within a formally managed area, although declaration of the existing Ramsar site on Anegada as a national park has been proposed. The current lack of a comprehensive plan to address invasive species management and protected areas management are key limiting factors. A headstart facility has been established by the British Virgin Islands National Parks Trust (BVI NPT) on Anegada; it can house up to 80 animals, is fully operational, and has repatriated 101 animals to the wild since 2003. A research programme led by IUCN Iguana Specialist Group (ISG) biologists is actively investigating the optimum age and size at which to release headstarted juveniles into the wild, with funding from the International Iguana Foundation (IIF), the IUCN Sir Peter Scott Fund for Conservation, AZA Conservation Endowment Fund, Nando Peretti Foundation, and others. A small *ex situ* population at the San Diego has produced 12 hatchlings to date, which will ideally form the basis for a genetically managed population in the U.S. to serve as a hedge against catastrophic losses on Anegada.



JOHN BINNS

Anegada Iguana, *Cyclura pinguis*, Anegada Headstarting Facility



2 Overall Goal

“To Restore a Self-Sustaining Population of Anegada Iguanas on the Island of Anegada, BVI. “



LEE PAGNI

Raymond Walker releases a headstarted Anegada Iguana in 2004



3 Objectives, Specific Results, and Action Steps

3.1 OBJECTIVE: Implement control programmes for invasive species on Anegada sufficient to mitigate their negative impacts on the wild iguana population.

3.1.1 Result: Effective cat control programme designed and implemented.

- Establish numbers, GPS locations, and reproductive status of all domestic, non-feral cats on Anegada by conducting an assessment of the houses and commercial premises, recording the number and location of domestic cats, and establishing whether the animals are spayed or neutered by interviewing pet owners.

Action: Kelly Bradley and Rondel Smith

Date: November 2006

Funding required: None

- Investigate feasibility of implementing a sterilization programme for all domestic, non-feral cats on Anegada through provision of free veterinary services for all existing and new pets. Check with BVI Department of Agriculture on status of existing program.

Action: BVI NPT, BVI veterinarians, Bonnie Raphael (WCS), Fort Worth Zoo veterinarians

Date: January 2007

Funding required: \$5,000 annually for a minimum of three years

- Review existing legislation pertaining to domestic cats and dogs in relation to movement between islands with particular reference to Anegada and advocate for creation of new legislation requiring sterilization of all pets on Anegada and restricting movement of additional pets to Anegada. The enforcement of these regulations will require compliance from the Anegada community, in addition to visitors on land and sea whose support must be generated as a result of a comprehensive public awareness campaign.

Action: BVI NPT

Date: January 2007

Funding required: Staff time

- Review previous proposal by Dr. Richard Veitch and develop new budgeted proposal for island-wide eradication of feral cats, in conjunction with the ISG. Review existing research and collate biological records and GIS data to develop the plan, which will cover all known predators. Ensure that public awareness and education are included in the plan to ensure long-term success.

Action: Island Conservation (IC), ISG, BVI NPT

Date: September 2006

Funding required: \$11,000 to be covered by a donation from the San Diego Zoo (SDZ) to the IIF

- Identify potential funding sources, including grant opportunities, for the implementation of the feral animal eradication plan, to include consultancy fees, equipment and maintenance costs, and a public awareness campaign.

Action: BVI NPT, Island Conservation, ISG

Date: December 2006

Funding required: None



- Initiate an ongoing feral cat control programme around the Anegada refuse site and in core iguana areas on a bi-weekly basis, using humane methods that will not impact upon the iguana population, e.g. laming and shooting or humane trapping. Check with BVI Department of Agriculture on status of existing program.

Action: BVI NPT, Island Conservation, ISG

Date: September 2006

Funding required: TBD

3.1.2 Result: Effective dog control programme designed and implemented.

- Conduct an assessment of the houses and commercial premises on the island to record the number of domestic dogs and determine their location using GPS. Establish whether dogs are already spayed or neutered by interviewing pet owners.

Action: Kelly Bradley and Rondel Smith

Date: November 2006

Funding required: None

- Instigate a sterilization programme for all domestic dogs on Anegada through the provision of free veterinary services for all existing and new pets.

Action: BVI NPT, BVI veterinarians, Bonnie Raphael (WCS), Fort Worth Zoo veterinarians

Date: January 2007

Funding required: \$5,000 annually for 3 years, then review

3.1.3 Result: Effective rat control programme designed and implemented for Windberg Cay.

- Eradicate black rats from Windberg Cay using bait stations that will not impact the iguana population or other wildlife. Following the initial eradication phase, there should be spot checks every six months to determine if a reinvasion has occurred.

Action: ISG, BVI NPT

Date: July 2006

Funding required: \$250

3.1.4 Result: Effective livestock control programme designed and implemented.

- Review all literature pertaining to feral ungulates (cows, goats, sheep, and donkeys) on Anegada contained within the archives of relevant BVI conservation institutions, including BVI NPT and BVI Conservation & Fisheries Department, in addition to a web-based search for published research papers.

Action: BVI NPT, Kelly Bradley, in consultation with IC

Date: July 2006

Funding required: None

- Collaborate with BVI Department of Agriculture to assess the feasibility of modifying Fountain Well within the eastern pond complex in order to reduce water availability for livestock and feral cats. Determine why the well was recently reopened through discussions with the Department of Agriculture and Anegada residents, and establish alternative ways to utilize the site.



Action: BVI NPT, BVI Department of Agriculture, Rondel Smith

Date: July 2007

Funding required: None

- Discuss with Dr. Stacey Lettsome and work collaboratively with BVI Department of Agriculture on development of a livestock eradication/control programme to ensure that livestock are minimally removed from within the Western Ponds complex (Ramsar site), Bones Bight, and Windlass Bight areas. This will be the primary responsibility of the Department of Agriculture, as part of the territory-wide livestock control programme. Island-wide eradication is preferable, but in lieu of this perimeter fencing could be utilized to permanently exclude livestock from within the key areas of iguana habitat, once the Ministry of Natural Resources and Labour has granted permission.

Action: BVI NPT, BVI Department of Agriculture, IC, ISG

Date: January 2009

Funding required: BVI government

3.1.5 Result: Effective invasive plant control programme designed and implemented.

- Conduct an assessment of the flora of Anegada to identify species that are non- native and may pose a threat to the iguana habitat as part of the ongoing Darwin Initiative. Undertake a broad based sampling strategy using GIS to characterise, classify, and ground-truth the component habitat types throughout Anegada and create a vegetation map to serve as an important planning and management tool.

Action: BVI NPT, Royal Botanic Gardens Kew

Date: January 2008

Funding required: Provided from the UK Darwin Initiative Fund

- Initiate a biodiversity recovery assessment project following the removal of cattle and donkeys, including monitoring selected sites and recording the vegetation that regenerates.

Action: BVI NPT, Royal Botanic Gardens Kew

Date: January 2010

Funding required: TBD

- Collaborate with BVI Department of Agriculture to remove invasive whistling pine (*Casuarina equisetifolia*) saplings from the Ramsar site, core iguana nesting areas, and Crown lands. The whistling pine was introduced to Anegada for landscaping and shade within private property, but has spread beyond these areas and is now commonly found along the coast. Removal is important to prevent degradation of iguana nesting substrates due to developing root systems. To facilitate this removal and ensure collaboration, BVI NPT will meet with the BVI Department of Agriculture to discuss the implications of the spread of this invasive species on the integrity of iguana habitats.

Action: BVI NPT, BVI Department of Agriculture

Date: January 2008

Funding required: None

3.1.6 Result: Residents of Anegada and visiting tourists are aware of invasive species issues facing the island and the importance of preventing future invasions and/or re-invasions.



- Develop a public awareness programme to prevent the introduction of invasive species by visitors, with particular attention to non-native species, including domestic cats and dogs, green iguanas, and mongooses. This programme should include production of a brochure to be given to all marine visitors, creation of posters for display at ports of entry throughout the BVI, collaboration with Customs Department officials, direct communication with commercial vessel operators conducting tours to Anegada, and signage at key entry points along the coast.

Action: BVI NPT, Rondel Smith, Lee Pagni

Date: July 2007

Funding required: \$3,000

3.2 OBJECTIVE: Enhance effectiveness of the headstart-release program to maximize recruitment of headstarted iguanas into the wild population.

3.2.1 Result: Improve conditions at the headstart facility to ensure optimum animal care and management and enhanced public awareness of the headstart programme.

- Ensure that adequate space exists within the headstart facility to prevent overcrowding, competition for food, and fighting, and that sufficient nutritious food is available to ensure optimal growth. An analysis of the monthly collection of growth, body condition, and behavioral data will guide the transfer of iguanas between cages, thereby actively managing the conditions potentially impacting growth rates.

Action: BVI NPT, Dallas Zoo, San Diego Zoo

Date: Ongoing

Funding required: Operational costs, covered by BVI NPT

- Develop an on-grounds base for management of the iguana programme. Construct a small multi-purpose building that will provide wardens with adequate space for an office, including desk space with a computer and internet connection, counter surfaces for food preparation, storage facilities, restroom, refrigerator, and sink area. The base will provide visitors and residents with a point of contact for inquiries.

Action: BVI NPT

Date: May 2008

Funding required: \$17,000

- Implement increased security measures through installation of security lights with motion sensors.

Action: BVI NPT

Date: October 2006

Funding required: \$750

- Review and update the existing disaster preparedness plan for the headstart facility to ensure appropriate preventative measures for human-induced and natural disaster events. Immediate analysis of disaster events by onsite wardens and BVI NPT will ensure that the plan is improved and reflects current events.

Action: BVI NPT, Glenn Gerber, Kelly Bradley

Date: July 2006

Funding required: None



- Enhance the headstart facility to include shaded areas, benches, and an information kiosk in order to improve the visitor experience, as well as donation boxes to collect small contributions. Continue landscaping activities and grounds maintenance, with additional planting of local plant species, including iguana food plants and shade trees (e.g. acacia and sea grape). Develop a gift shop area to enable the sale of BVI NPT merchandise, including t-shirts, caps, postcards, and mugs that will benefit the iguana project.

Action: BVI NPT

Date: May 2008

Funding required: TBD

- Raise public awareness of the international and national protected status of the Anegada iguana through provision of signage at the headstart facility that details degree of endangerment and penalties imposed for persons violating these laws.

Action: BVI NPT, Lee Pagni

Date: July 2007

Funding required: Covered by IUCN Sir Peter Scott Fund grant

3.2.2 **Result: A sufficient number of healthy and genetically optimal animals are produced for release on an annual basis.**

- Collect and collate biological data pertaining to the health and growth of the headstarted iguanas and enter this information into the SPARKS database. Data are to be collected by BVI NPT wardens on a monthly basis and kept in a central location that provides a continuous record that is readily available to the population manager.

Action: BVI NPT wardens, Tandora Grant

Date: July 2007

Funding required: Staff time

- Implement a system that ensures routine distribution of spreadsheet records for iguanas in the headstart facility from BVI NPT wardens to studbook keeper and population manager Tandora Grant at the San Diego Zoo.

Action: BVI NPT, Tandora Grant

Date: Ongoing

Funding required: None

- Analyze genetic data collected from headstart iguanas in order to refine the procedures pertaining to management and release. Data interpretation will ensure the best management practices are employed to ensure long-term survival in captivity and in the wild following release.

Action: Glenn Gerber, Tandora Grant

Date: November 2007

Funding required: None



3.2.3 Result: Release strategy is optimized to ensure that the maximum number of headstarted animals is repatriated with a high survival rate each year.

- Experimentally determine the optimum size for release that will ensure survival by incrementally reducing the release size each year and intensively monitoring released iguanas via radiotracking. This will also provide important information on the survival status of each released iguana and its movement range in relation to the original release site.

Action: Kelly Bradley, Glenn Gerber

Date: December 2006

Funding required: \$20,000 per year

- Ensure the ongoing collection of juveniles and hatchlings from the wild for inclusion in the headstarting programme on an ongoing basis. This process will prevent the loss of juveniles and hatchlings from predation and ensure their survival, while maximizing the genetic representation within the headstart facility. The number of juveniles and hatchlings to be collected from the wild each year will be determined by the maximum capacity of the headstart facility.

Action: ISG, BVI NPT

Date: Ongoing

Funding required: \$6,000 per year for travel expenses

- Develop and formalize a headstarting strategy that is updated and refined as a result of the incorporation of new data and research. Ensure consistency with regard to collection of biological data, data analysis, information sharing between researchers and headstart facility managers, and implementation of adaptive management practices to ensure the preparation of juveniles for release and long-term survival in the wild.

Action: BVI NPT, ISG

Date: Ongoing

Funding required: TBD

3.2.4 Result: A small *ex-situ* population of Anegada iguanas is maintained to enhance international awareness of conservation status and needs.

- Transfer a small number (-ten) of juveniles from the headstart facility in Anegada to Fort Worth Zoo, to form an *ex-situ* group for display, education, and research purposes. The implementation of this activity would depend on approval from the authorities and would have to be supported by local Anegadians.

Action: BVI NPT, in coordination with Rick Hudson and AZA Rock Iguana SSP

Date: December 2007

Funding required: Covered by participating institutions

3.3 OBJECTIVE: Collect scientific data to aid in the long-term recovery and management of the wild iguana population on Anegada.

3.3.1 Result: Sufficient data on population size, distribution, and habitat requirements of wild iguanas collected and analyzed to guide effective management decisions.



- Implement a mark-recapture program for wild iguanas in the core iguana area that can be used to estimate population size.

Action: Glenn Gerber, Kelly Bradley, with assistance from ISG, IRCE, BVI NPT

Date: beginning July 2006

Funding required: \$15,000 annually

- Use GPS technology to map and mark the location of iguana burrows on Anegada and record their status on an ongoing basis. Data will be incorporated into the National GIS database.

Action: Glenn Gerber, Kelly Bradley, with assistance from ISG, IRCE, BVI NPT

Date: beginning July 2006

Funding required: In conjunction with mark-recapture efforts

- Determine habitat carrying capacity for iguanas in relation to vegetation distribution. Map the primary vegetation types within the iguana habitat using GPS, with particular focus on plant species that comprise iguana diets. Correlate distribution of iguanas and retreats with distribution of key vegetation types/food plants.

Action: BVI NPT GIS personnel in conjunction with ISG and Kew Gardens

Date: July 2008

Funding required: TBD

3.3.2 **Result: Sufficient data on the genetic structure of the wild population collected and analyzed to guide effective management decisions.**

- Analyze blood samples from captive iguanas in the headstart facility and captured wild iguanas using appropriate genetic markers to document genetic diversity. This will assist headstart managers in targeting sites in the wild for future collections to ensure genetic diversity within the headstart facility.

Action: San Diego Zoo

Date: January 2006

Funding required: IMLS funding in place

3.3.3 **Result: Sufficient data on threats to the wild population collected and analyzed to guide effective management decisions.**

- Conduct an assessment of the historical distribution of Anegada rock iguanas based upon a combination of methods, including discussions with the older generation of Anegadians and incorporation of the published map showing the historical agricultural walls into the GIS.

Action: Kelly Bradley, BVI NPT

Date: July 2007

Funding required: None

- Determine the causes of mortality in released animals using an onsite necropsy protocol for tissue samples. More detailed information is required about the status of the iguanas once they have been released and the conditions that may lead to their death to assist in the management of the headstart programme and refinement of release strategies.



Action: Fort Worth Zoo

Date: Ongoing since 2004

Funding required: TBD, potential for Morris Animal Foundation or IIF funding

- Implement a study of the impact of cat predation on hatchling and juvenile iguanas in conjunction with any feral cat eradication/control programs. Map all cat captures with GPS and preserve all cat stomach contents for analysis.

Action: Graduate Student in conjunction with IC, ISG, and BVI NPT

Date: July 2007

Funding required: TBD

3.3.4 **Result: Improved infrastructure in place for conducting scientific research studies on Anegada.**

- Assess the cost-effectiveness of developing a dedicated field station on Anegada to be utilized by researchers and BVI NPT personnel. This will entail building on initial work of BVI NPT staff to identify an appropriate site, development of basic plans, acquisition of estimates for construction, and securing funds to implement the project.

Action: BVI NPT, Glenn Gerber, Kelly Bradley

Date: December 2006

Funding required: None

- Acquire a vehicle to be utilized by researchers and headstart facility managers for field research activities. This investment would represent significant savings on the recurrent vehicle rental expenses associated with the project.

Action: BVI NPT, ISG

Date: January 2006

Funding required: Joint IIF/IRCF funding in place

- Ensure the timely distribution of data, reports, and other documents pertaining to the iguana recovery effort to all project partners and authorities. This is imperative to ensure effective project management using all available resources.

Action: All

Date: Ongoing

Funding required: None

3.4 **OBJECTIVE: Protect sufficient high quality habitat to ensure the long-term viability of a healthy iguana population.**

3.4.1 **Result: Western Ponds Complex and core iguana nesting area established as a protected area.**

- Advocate for the declaration and subsequent transferral to BVI NPT of the Western Ponds Ramsar site, Bones Bight, and Windlass Bight into the NPT System of Parks and Protected Areas. These areas represent the core nesting sites for Anegada iguanas along the northern coast. Conservation of these areas is critical to ensure the protection of the wild iguana population. The areas would be managed as per the IUCN classification system, as Category I (b): Wilderness Area: protected area managed mainly for wilderness protection. Public support for this conservation action is required to enable successful acquisition.



Action: BVI NPT

Date: December 2006

Funding required: None

- Formally present Species Recovery Plan to Governor, Chief Minister, and Minister of Natural Resources.

Action: BVI NPT and ISG representative

Date: October 2006

Funding required: None

- Acquire Ministerial support for the declaration of the protected area. This will require the support of the district representative and the Minister for Natural Resources and Labor, in order to present this request to the Executive Council (EXCO). Generate support through private meetings, position papers, and other Government forums.

Action: BVI NPT

Date: July 2007

Funding required: None

- Continue negotiation with the Ministry of Natural Resources and Labor on the boundary of the proposed protected area to ensure that the core nesting areas within Bones Bight and Windlass Bight are included. This will require continued discussion with the Ministry and the Department of Survey in order to monitor land claims within the proposed boundary. Note that development applications from the Town and Country Planning Department will be reviewed in relation to potential land claims throughout Anegada that may conflict with the proposed protected area.

Action: BVI NPT

Date: January 2009

Funding required: None

- Continue to interact and negotiate with the Anegada Lands Committee to ensure the integration of the proposed protected area of the Western Ponds Ramsar site, Bones Bight and Windlass Bight into the overall plan for land distribution on the island. This entails the presentation of maps delineating the proposed boundary at committee meetings on Anegada, in combination with recent statistics and scientific data on the status of the iguana population in the wild and its global significance.

Action: BVI NPT

Date: January 2009

Funding required: \$2,000

3.4.2 Result: Management plan in place for the new protected area.

- Integrate emerging scientific data into the management plan for the Western Ponds, Bones Bight, and Windlass Bight proposed protected area. This should encompass data from current projects, including the Darwin Initiative. This will ensure that all new information regarding the island's biodiversity is utilized for best management practices.

Action: BVI NPT

Date: September 2008

Funding required: None



- Develop an integrated protected area management plan for the Western Ponds Ramsar site, Bones Bight, and Windlass Bight protected area, with financial resources to enable immediate implementation. This will require assistance from an intern to conduct background research and gather existing information on the proposed protected area, followed by BVI NPT internal seminars to discuss the existing and proposed conservation requirements and management regime, followed by public meetings with stakeholders to review the proposed management plan. Recommendations within the plan may require the modification of certain activities on Anegada, e.g. quantity of traffic through the core iguana nesting area.

Action: BVI NPT, local stakeholders

Date: December 2009

Funding required: \$10,000

- Develop a protective strategy that promotes the coexistence of iguanas with people, while ensuring long-term species conservation. Address all human-related threats to iguanas and propose long-term solutions, e.g. the creation of covenant agreements on the importation of cats and dogs, and ecotourism opportunities within iguana habitat. Produce a draft coexistence strategy for presentation at public meetings with residents, stakeholders, and policy makers. Following these meetings, the strategy will be modified to incorporate recommendations and accepted policies.

Action: BVI NPT, ISG, Lee Pagni, Kelly Bradley, Glenn Gerber

Date: January 2007

Funding required: \$5,000

3.4.3 Result: Public support for protected area generated.

- Generate wider public support for the proposed protected area consisting of the Western Ponds Ramsar site, Bones Bight, and Windlass Bight. Increase the general level of awareness throughout the BVI of the global significance of the endemic iguana and other endangered species contained within the proposed protected area and highlight the threats placed upon this habitat. Utilize a variety of methods to distribute information, including public meetings on Tortola and Anegada, press conferences, scientific lectures at HLSCC, and newspaper and television features. Generate additional public support for the inclusion of iguana habitat areas outside of the Ramsar site into the proposed protected area on Anegada through public meetings, distribution of educational materials, and personal meetings with stakeholder groups, including residents, policy makers, and visiting Anegadians who live overseas.

Action: BVI NPT, ISG

Date: January 2007

Funding required: \$6,000

3.4.4 Result: Formal legal protection for protected area achieved.

- Integrate iguana conservation measures into the recently reviewed and updated draft BVI National Parks Act 2004 to ensure adequate protection measures exist within protected areas. It is essential to ensure that these conservation measures are also integrated into the drafting of the new BVI Environmental Ordinance, which encompasses the entire BVI. This will be a collaborative activity with the Conservation and Fisheries Department, and the Attorney General's Chambers.

Action: BVI NPT, BVI Conservation and Fisheries Department

Date: December 2006

Funding required: None



- Develop an Executive Council (EXCO) paper formally requesting the declaration of the Western Ponds Ramsar site, Bones Bight and Windlass Bight protected area as a National Park. This decision paper will be drafted by the NPT and presented to EXCO by the Minister of Natural Resources and Labour.

Action: BVI NPT, BVI Ministry of Natural Resources and Labour

Date: May 2007

Funding required: None

- Mitigate development activities within the Western Ponds Ramsar site, Bones Bight, and Windlass Bight area prior to formal national park designation. Minimize the effects of development within these key iguana habitats, through accidental damage within the Ramsar site or intentional landscape modification. Daily monitoring activities of the Senior Terrestrial Warden will identify new development threats and enable further investigation with the Town Planning Department, in order to assess the legal status of the development activity. Following park designation and the completion of initial protected area management activities, mitigation of damage within the protected areas' buffer zone will become the primary concern, in addition to continued surveillance for encroachment activities.

Action: BVI NPT, Town Planning Department

Date: July 2009

Funding required: None

- Implement the final stage of the declaration process, which entails the legal transferral of the land title and ownership of the Western Ponds Ramsar site, Bones Bight, and Windlass Bight protected area to BVI NPT, subsequent to EXCO approval of the request. The process is complete when ownership is confirmed by the Chief Registrar of Lands and recorded in the Land Registry Department archives.

Action: BVI NPT, BVI Ministry of Natural Resources and Labour, Land Registry, Governor's Office

Date: October 2009

Funding required: None

- Following the declaration and transferral of the Western Ponds Ramsar site, Bones Bight, and Windlass Bight protected area to BVI NPT, boundary delineation is necessary to ensure effective management. This will require the assistance of the Ministry of Natural Resources and Labor and the Survey Department to produce annotated maps and ground references to identify the exact boundary for perimeter fencing, if required.

Action: BVI NPT, Ministry of Natural Resources and Labour, Survey Department

Date: January 2010

Funding required: \$5,000

3.5 **OBJECTIVE: Implement a comprehensive public outreach programme for Anegada, using the Anegada iguana as a flagship species.**

3.5.1 **Result: Campaign to raise general awareness about biodiversity conservation on Anegada designed and implemented.**



- Develop and implement a public awareness programme about the biodiversity of Anegada directed towards Anegada residents and students, in addition to visitors, with particular attention to overall threats to endangered species, the value of endangered and endemic species on a global perspective, and the conservation activities in place to address these issues. This would include production of brochures and posters for distribution on Anegada, school visits, guided tours within the Ramsar site, and public meetings.

Action: BVI NPT

Date: January 2008

Funding required: \$5,000

3.5.2 **Result: Capacity for educational use of the headstart facility enhanced.**

- Use the headstart facility as a centre for environmental education and increased awareness of the biodiversity of Anegada, with particular focus on iguanas. The headstart facility is a key visitor attraction and is in a central location within the Settlement, in close proximity to the school. Creation of additional interpretive panels will ensure that there is sufficient on-site information to describe the activities of the iguana recovery project, with an emphasis on headstarting as a conservation strategy. Provide educational brochures at the headstart facility to describe and promote the project for visitors and tourists that will highlight the need for financial assistance to ensure continued project success.

Action: BVI NPT, Lee Pagni, John Binns

Date: October 2006

Funding required: \$6,000

- Integrate students into the fieldwork conducted by Kelly Bradley, including class visits and individual student research projects. Class visits to the headstart facility and guided tours of the iguana habitat will be offered to the Anegada school throughout the year by the BVI NPT. BVI NPT will propose these educational opportunities to the Department of Education at the beginning of each school year.

Action: BVI NPT, Kelly Bradley, Lee Pagni

Date: Ongoing

Funding required: None

- Increase visitor awareness of the headstart facility prior to and upon arrival in Anegada through use of the media and tourism publications, provision of signage and brochures, and verbal recommendations. Create hot-links between the BVI Tourist Board web site and the BVI NPT web site, publish articles in ‘The Welcome Tourist Guide’ and other tourism publications, distribute leaflets for taxi drivers, and erect directional signs at entry points to the island.

Action: BVI NPT, Lee Pagni, Kelly Bradley, John Binns

Date: November 2006

Funding required: \$4,000 from Sir Peter Scott Fund grant

3.5.3 **Result: General awareness of threats to iguana populations and progress toward recovery programme goals regularly communicated to Anegada residents.**

- Create a bi-annual or quarterly newsletter on the status of the iguana recovery programme for distribution to all Anegada residents, schools, and tourism facilities. This would provide updates on all programme activities and ensure that all upcoming events are announced and participation encouraged, where applicable. The newsletter will also be used to raise general awareness on iguana habitat, its threats, and conservation needs. Newsletter distribution should ultimately be expanded to include the entire BVI.



Action: BVI NPT, San Diego Zoo, Fort Worth Zoo

Date: July 2006

Funding required: \$2,000 per year

- Implement an awareness campaign on Anegada and throughout the BVI about the threats posed by feral animals to iguanas, with particular attention to cats and dogs. Incorporate a variety of approaches, including public meetings, leaflets and posters, government meetings with relevant departments, local television, and collaboration with the Humane Society. The campaign will focus upon the need for spaying or neutering all pets on the island, trapping all feral cats and dogs, and preventing the reintroduction of feral animals by visitors.

Action: BVI NPT, Island Conservation, Lee Pagni

Date: July 2007

Funding required: \$3,000

- Promote free services available to all Anegadian residents to spay and neuter cats and dogs. Advertise this programme in the months prior to the arrival of vets from Tortola and overseas to ensure the maximum number of animals can be included in the programme.

Action: BVI NPT, Lee Pagni

Date: October 2007

Funding required: \$500

3.5.4 **Result: Training workshop for local teachers developed and implemented.**

- Implement a teacher-training workshop for Anegada teachers that will enable them to integrate information about iguanas, their habitat, and their conservation needs into the school curriculum. Create educational resources for teachers, including fact sheets and work activities. Permission from the Department of Education will be sought by BVI NPT.

Action: Lee Pagni, with local teachers, BVI NPT

Date: October 2007

Funding required: \$2,000

3.5.5 **Result: Species Recovery Plan formally presented to Anegada stakeholders and policy makers on Tortola.**

- Present the approved Anegada Iguana Species Recovery Plan to members of the public during a public meeting on Anegada, with special invitations to key stakeholders and policy makers from Tortola. Once the plan's overall goals are understood and accepted by the public and policy makers, the task of implementing the plan will be simplified and more effective. Comments and feedback from this public meeting will be taken into consideration and may result in the modification of the plan.

Action: BVI NPT

Date: June 2006

Funding required: None

3.5.6 **Result: CITES links and enforcement capabilities strengthened through education and outreach.**



- Implement training sessions for Police and Customs officers on Tortola and Anegada in order to raise awareness of the CITES convention and the Endangered Plants and Animals Ordinance (CAP 89, 1987) to prevent the illegal removal of iguanas from Anegada for export. Additional training will be required for hotel operators and personnel from ports of entry, so they become generally aware of the threat posed by international trade in endangered species and are alert to suspicious activity and/or the presence of persons that may be involved in smuggling activities.

Action: BVI NPT with support from ISG member Bruce Weissgold

Date: April 2008

Funding required: \$2,000

- Continue to develop and strengthen links between the ISG with the US Fish and Wildlife Service (USFWS), TRAFFIC, and the CITES Secretariat, to ensure the adequate monitoring of CITES wildlife violations and information sharing on potential smuggling operations.

Action: ISG, Bruce Weissgold

Date: April 2008

Funding required: None

3.6 OBJECTIVE: Secure sufficient financial resources to implement the Anegada Iguana Species Recovery Plan.

3.6.1 Result: Local resources secured to support implementation of the Species Recovery Plan.

- Maintain BVI NPT government funding streams from existing sources, but emphasize the need for new fund acquisition by highlighting project milestones, such as the successful release of headstarted iguanas annually from 2003-05. Provide project updates through the dissemination of iguana project newsletters at relevant government meetings, press releases to the media, and BVI NPT publications.

Action: BVI NPT

Date: Ongoing

Funding required: None

3.6.2 Result: International resources secured to support implementation of the Species Recovery Plan.

- Explore new UK Government funding sources, emphasizing project milestones, such as the successful release of headstarted iguanas annually from 2003-05. Provide project updates through the dissemination of iguana project newsletters to the UK Overseas Territories Conservation Forum (UKOTCF) and the Governor's Office.

Action: BVI NPT

Date: Ongoing

Funding required: None

- Develop an Anegada-based international iguana adoption programme and associated production of merchandise in order to generate financial and public support for the headstart effort, while raising awareness of the international significance of these endemic iguanas. The adoption programme and associated merchandising can be promoted on the BVI NPT website and linked to the websites of partner organizations such as IIF and IRCF.



Action: BVI NPT, San Diego Zoo, Fort Worth Zoo, IRCF

Date: March 2008

Funding required: TBD

- Maintain funding streams from existing sources within the US zoo community, but emphasize new fund acquisition by highlighting project milestones, such as the successful release of headstarted iguanas annually from 2003-05. Provide project updates at annual ISG meetings and disseminate iguana project newsletters within the US zoo community.

Action: BVI NPT, San Diego Zoo, Fort Worth Zoo, International Iguana Foundation

Date: Ongoing

Funding required: None

- Identify at least four charitable foundations within the US and Europe that are potential sources of funding on an annual basis. Identification of external funding is essential to ensure the continued development of the headstart facility.

Action: BVI NPT, San Diego Zoo, Fort Worth Zoo, International Iguana Foundation

Date: Ongoing

Funding required: None

3.7 OBJECTIVE: Ensure effective programme oversight, coordination, and evaluation for all aspects of the Anegada Iguana Species Recovery Plan.

3.7.1 Result: Anegada iguana recovery team formed and actively functioning.

- Develop and maintain a contact list of the members of the iguana recovery team, to include Joseph Smith Abbott (director@bvinternationalparkstrust.org), Esther Georges (deputydirector@bvinternationalparkstrust.org), Nancy Woodfield (nkwoodfield@yahoo.com), Samantha Addinall (samanthaaddinall@yahoo.com), Allison Alberts (aalberts@sandiegozoo.org), Rick Hudson (rhudson@fortworthzoo.org), Glenn Gerber (ggerber@sandiegozoo.org), John Binns (JFB@ircf.org), Kelly Bradley (kabradley13@hotmail.com), Fred Burton (fjburton@blueiguana.ky), Lee Pagni (leeontour@yahoo.com), Jeff Lemm (jlemm@sandiegozoo.org).

Action: BVI NPT

Date: July 2006

Funding required: None

3.7.2 Result: Iguana project achievements reviewed and archived on an annual basis.

- Conduct an annual review of the iguana project's achievements in relation to the objectives, results, and action steps outlined in the Species Recovery Plan. Annual review may take place at the ISG annual meeting, following an internal review at BVI NPT. Annual reports on all aspects of implementation of the Recovery Plan should be provided one month prior to annual review meetings.



Action: BVI NPT

Date: Ongoing

Funding required: None

- Maintain a full project archive and database in two locations, one based at BVI NPT and the second with the ISG at the San Diego Zoo. The archive will include hard and electronic copies of all project reports, published material, unpublished project reports, correspondence, video footage, maps, and images in slide or digital footage. Raw data from population assessments or other scientific research could also be included. The archive will contribute positively toward the development of fundraising proposals and project communications. Access should be restricted initially to members of the iguana recovery team.

Action: BVI NPT, ISG

Date: September 2007




Funding required: None



4 Appendices

4.1 Action Overview and Implementation Notes

Color Decoder for “Notes”:

	Completed
	Work in Progress
	No Action

4.1.1 2006

Month Due	Project	Plan Ref.	Agency	Notes
January	Genetic Data- future nest collections determined	3.3.2	SDZ	
January	Research Infrastructure- vehicle acquired	3.3.4	BVINPT, ISG	LP: Vehicle acquired (date?). What is the current status?
June	SRP Presentation- public input sought	3.5.5	BVINPT	
July	Rat Control- eradicated from Windberg Cay	3.1.3	BVINPT	
July	Livestock Control- literature search	3.1.4	BVINPT, K. Bradley	KB- Completed (4 papers). This can be done every year as new papers are published, but it isn't that important.
July	Headstart Facility- update disaster preparedness plan	3.2.1	BVINPT, G. Gerber, K. Bradley	KB- Samantha A. may have worked on this.
July	Data Collection- population size estimate	3.3.1	IRCF, ISG	KB- Completed almost annually. Last time was 2009. KB will get numbers to LP
July	Iguana Programme Awareness- newsletter	3.5.3	SDZ, Ft. Worth Zoo, BVINPT	LP: One newsletter published in 2004 with excellent public response. Content for a second newsletter was being collected as of 2006. This action item should ideally be ongoing and carried out by the BVINPT
July	Recovery Team- formed and active	3.7.1	BVINPT	
Sept.	Cat Control- eradication plan	3.1.1	BVINPT, IC, ISG	Completed in July 2006.
Oct.	Headstart Facility- increased security at facility	3.2.1	BVINPT	



Month Due	Project	Plan Ref.	Agency	Notes
Oct.	Habitat Protection-present SRP to head of BVI government	3.4.1	BVINPT, ISG	
Oct.	Headstart Center Education- improve capacity of center	3.5.2	BVINPT, L. Pagni	LP: Teacher training carried out October 2005. Release event with teachers and students held October 2006. This action item should be ongoing with trainings occurring every other year at the minimum.
Nov.	Cat Control-information on non-feral cats	3.1.1	K. Bradley, R. Smith	KB- Will start on October 2011 trip
Nov.	Dog Control-information on non-feral dogs	3.1.2	K. Bradley, R. Smith	KB- Will start on October 2011 trip
Nov.	Headstart Center Education- Raise visitor awareness of headstart facility	3.5.2	BVINPT, L. Pagni, K. Bradley	LP: Headstart facility interpretive guides developed and delivered. Are these being used? Feedback from BVINPT? Last outreach done November 2006 (interviewed for sandwatch). 2010- Mohammed bin Zayed grant for FWZ to carry out. Will have new graphics in 2011 from this grant. LP to send KB the PDF of the headstart file.
Dec.	Cat Control- Identify funding sources for eradication	3.1.1	BVINPT, IC, ISG	
Dec.	Headstart Survival-optimum release size	3.2.3	K. Bradley	Completed, decreased from 2000g to 400g. Work to be published
Dec.	Research Infrastructure-assess possibility of dedicated field station	3.3.4	BVINPT, G. Gerber, K. Bradley	KB- discussed but nothing secured. 2010 No new information- not much possibility to do this.
Dec.	Habitat Protection-advocate for protected area	3.4.1	BVINPT	Advocate to who? What is the measure of success?
Dec.	Protected Area Status-iguana conservation measures into existing legislation	3.4.4	BVINPT	



4.1.2 2007

Month Due	Project	Plan Ref.	Agency	Notes
January	Cat Control-sterilization programme	1.1	BVINPT, Dr. B. Raphael	
January	Dog Control-sterilization programme	1.2	BVINPT, Dr. B. Raphael	
January	Cat Control-legislation/enforcement	1.1	BVINPT	
January	Protected Area Plan-people and iguana plan developed	4.2	BVINPT, L. Pagni, K. Bradley	
January	Protected Area Support- public campaign initiated	4.3	BVINPT, ISG	
May	Protected Area Status-EXCO declaration for boundaries	4.4	BVINPT	
July	Livestock Control-modify Fountain Well	1.4	BVINPT	
July	Invasive Awareness-campaign initiated	1.6	BVINPT, Lee Pagni	2010- KB does this informally with meetings, class presentations, etc.
July	Headstart Facility-education campaign	2.1	BVINPT, Lee Pagni	2010- KB does this informally with meetings, class presentations, etc.
July	Headstart Release-SPARKS database	2.2	BVINPT, T. Grant	
July	Wild Population Threats- historical distribution of iguanas	3.3	K. Bradley, BVINPT	KB- Would like to have a map of historical distribution. Has three old scientific papers that mention iguanas. Would also like to integrate anecdotal information from locals. Won't be completed any time soon. Idea- hand out maps to people and fill them out.
July	Wild Population Threats- study of cat predation	3.3	BVINPT, ISG, IC	
July	Habitat Protection-acquire ministerial support for the protected area	4.1	BVINPT	
July	Anegada Programme Awareness- feral animal awareness campaign	5.3	BVINPT, IC, L. Pagni	
Sept.	Project Achievements-project archive	7.2	BVINPT, ISG	



Month Due	Project	Plan Ref.	Agency	Notes
Oct.	Wild Population Threats- <i>Alsophis</i> study initiated	3.3	TBD, K. Bradley, C. Knapp	KB- Occurs opportunistically when K. Bradley catches snakes while in the field. No <i>alsophis</i> caught that has eaten an iguana yet. 2010- KB captured (killed) 3 snakes that ate hatchlings at the facility.
Oct.	Anegada Programme Awareness- promote free spay/neuter program	5.3	BVINPT, L. Pagni	
Oct.	Teacher Training- on Anegada	5.4	L. Pagni, BVINPT	
Nov.	Headstart Release- genetic data analyzed	2.2	G. Gerber, T. Grant	
Dec.	Ex-Situ Population- animals transferred	2.4	BVINPT, R. Hudson	



4.1.3 2008

Month Due	Project	Plan Ref.	Point Person/ Agency	Notes
January	Invasive Plant Control- programme designed and implemented	3.1.5	BVINPT	
January	Invasive Plant Control- whistling pine saplings removed from key areas	3.1.5	BVINPT	
January	Biodiversity Outreach- public awareness program initiated	3.5.1	BVINPT	
March	International Funding for SRP- iguana adoption programme	3.6.2	BVINPT, SDZ, Ft. Worth Zoo, IRCF	
April	CITES Enhancement- training session	3.5.6	BVINPT, B. Weissgold	
April	CITES Enhancement- improve linkages	3.5.6	ISG, B. Weissgold	
May	Headstart Facility- facility enhancement	3.2.1	BVINPT	
May	Headstart Facility- mult-purpose building	3.2.1	BVINPT	
July	Livestock Control- removed from iguana nesting areas	3.3.1	BVINPT	
July	Data Collection- determine habitat carrying capacity	3.4.2	BVINPT	
Sept.	Protected Area Plan- integration of scientific data	4.2	BVINPT	

**4.1.4 2009**

Month Due	Project	Plan Ref.	Agency	Notes
January	Livestock Control-livestock removed from Western Ponds complex	3.1.4	BVINPT	
January	Habitat Protection-negotiate protected area boundaries with Ministry of NR and L	3.4.1	BVINPT	
January	Habitat Protection-negotiate protected area with Anegada Lands Committee	3.4.1	BVINPT	
July	Protected Area Status-legal protection achieved	3.4.4	BVINPT	
Oct.	Protected Area Status-land ownership transferred	3.4.4	BVINPT	
Dec.	Protected Area Plan-plan completed	3.4.2	BVINPT	

4.1.5 2010

Month Due	Project	Plan Ref.	Agency	Notes
January	Invasive Plant Control-biodiversity recovery assessment completed	3.1.5	BVINPT	
January	Protected Area Status-boundary delineation completed	3.4.4	BVINPT	



4.1.6 Ongoing

Project	Plan Ref.	Agency	Notes
Headstart Facility- monthly collection of biological data	3.2.1	BVINPT, Dallas Zoo, SDZ	
Headstart Release- update spreadsheet records for database	3.2.2	BVINPT, T. Grant	
Headstart Survival- juveniles and hatchlings collected annually	3.2.3	BVINPT, ISG	
Headstart Survival- strategy updated	3.2.3	BVINPT, ISG	
Data Collection- iguana burrow database	3.3.1	K. Bradley, BVINPT	KB- Have approximately 150 burrows marked (GPS and permanent tag). Updated annually in October. Have a GIS database for this.
Wild Population Threats- mortality of released animals	3.3.3	TBD	KB- Completed in 2006
Research Infrastructure- timely distribution of data, reports, and other documentation	3.3.4	All	
Headstart Center Education- Student involvement in fieldwork and educational programmes	3.5.2	BVINPT, K. Bradley, L. Pagni	KB- Involves students when possible. School is reluctant to involve students because of permissions. 2010- Kelly goes annually.
Local Resources for SRP- maintain and improve funding streams and awareness of program	3.6.1	BVINPT	
International Funding for SRP- explore UK sources	3.6.2	BVINPT	
International Funding for SRP- maintain and increase zoo funding	3.6.2	BVINPT, SDZ, Ft. Worth Zoo, IIF	KB- 2010 FWZ is giving more funds. IIF funding received.
International Funding for SRP- identify 4 new external funding sources annually	3.6.2	BVINPT, SDZ, Ft. Worth Zoo, IIF	2010 Have Mohammed bin Zayed funding for one year.
Project Achievements- annual review	3.7.2	BVINPT	

