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**UNITED NATIONS EDUCATIONAL,
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**ORGANISATION DES NATIONS UNIES
POUR L'EDUCATION, LA SCIENCE ET LA CULTURE**

**CONVENTION CONCERNING THE PROTECTION OF THE WORLD
CULTURAL AND NATURAL HERITAGE**

**CONVENTION CONCERNANT LA PROTECTION DU PATRIMOINE
MONDIAL, CULTUREL ET NATUREL**

WORLD HERITAGE COMMITTEE / COMITE DU PATRIMOINE MONDIAL

Thirty-fourth session / Trente-quatrième session

**Brasilia, Brazil / Brasília, Brésil
25 July – 3 August 2010 / 25 juillet – 3 août 2010**

Item 7 of the Provisional Agenda: State of conservation of properties inscribed on the World Heritage List and/or on the List of World Heritage in Danger.

Point 7 de l'Ordre du jour provisoire: Etat de conservation de biens inscrits sur la Liste du patrimoine mondial et/ou sur la Liste du patrimoine mondial en péril

MISSION REPORT / RAPPORT DE MISSION

**Galapagos Islands (Ecuador) (1 bis)
Iles Galapagos (Equateur) (1 bis)**

**27 April – 6 May 2010
27 avril – 6 mai 2010**

This mission report should be read in conjunction with Document:
Ce rapport de mission doit être lu conjointement avec le document suivant:

WHC-10/34.COM/7A.Add

World Heritage Centre / IUCN
Reactive Monitoring Mission Report
Galapagos Islands
27 April – 6 May 2010



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ACRONYMS

AGROCALIDAD	Formerly Ecuadorian Agricultural Health Service or “Sistema Ecuatoriano de Sanidad Agropecuaria” (SESA)
AIM	Inter-institutional Management Authority or “Autoridad Inter-institucional de Manejo”
BTR	Brut tonnage register
CDF	Charles Darwin Foundation
CDRS	Charles Darwin Research Station
CIMEI	Inter-institutional Committees for the Control and Management of Introduced Species or “Comité inter-institucional por el Manejo de Especies Introducidas”
FEIG	Galapagos Invasive Species Control Fund
GC	Governing Council or “Consejo de Gobierno”
GEF	Global Environment Facility
GMR	Galapagos Marine Reserve
GNP	Galapagos National Park (referring to the terrestrial part of the Park)
GNPS	Galapagos National Park Service
INGALA	Galapagos National Institute or “Instituto Nacional para Galápagos”
IUCN	International Union for the Conservation of Nature
JMP	Participatory Management Board” or Junta de Manejo Participativo”
LOREG	Special Law for Galapagos or ““Ley Orgánica de Régimen Especial para la Conservación y Desarrollo Sustentable de la Provincia de Galápagos”
NGO	Non-governmental Organisation
OUV	Outstanding Universal Value
RETANP	Special Tourist Regulation in Protected Natural Areas or “Reglamento Especial de Turismo en Áreas Naturales Protegidas”
SVM	Satellite Vessel Monitoring System
SICGAL	System of Inspection and Quarantine of Galapagos or “El Sistema de Inspección y Cuarentena de Galápagos”
SoC	State of Conservation
State Party	State Party to the WH Convention (Government of Ecuador)
WH	World Heritage
UNESCO	United Nations Educational, Cultural and Scientific Organization

Cover photo to report: Land Iguanas *Conolophus subcristatus*, re-introduced to Baltra Island in the 1990’s after disappearing from this island. © Wendy Strahm/IUCN

EXECUTIVE SUMMARY AND PRINCIPAL RECOMMENDATIONS

The World Heritage Centre /IUCN mission requested by the World Heritage Committee at its 33rd session (Seville, 2009) took place from 27 April to 6 May 2010. The principal factor leading to the inscription of the property on the List of World Heritage in Danger arises from the breakdown of its ecological isolation due to the increasing movement of people and goods between the islands and the continent, facilitating the introduction of alien species which threaten species native to the Galapagos. This is fuelled by poor governance leading to inadequate regional planning and unsustainable tourism development. Illegal and excessive fishing pressures in the Galapagos Marine Reserve (GMR) were another factor contributing the Danger listing.

A list of 15 issues to be addressed was compiled by the World Heritage Committee (Decision **30 COM 7B.29**) in Vilnius. In its latest report to the World Heritage Committee, the State Party grouped these 15 issues under six main categories, and this report has followed this more logical presentation of the issues as follows (the letters of the original measures in the Decision in brackets):

1. Invasive alien species (prevention and control, measures a, g, h, l, j, k and o)
2. Fishing (efforts to eradicate illegal fishing and make legal fishing sustainable, measures i and e)
3. Tourism (both land- and ship-based, measure f)
4. Immigration (correct implementation of the Special Law, measure d)
5. Education (the need to develop local capacity, measures m and n)
6. Governance (the need to denote clear authority, providing transparency and accountability, in particular with respect to regional planning (in part measures b and c).

Overall, although good and measurable progress has been achieved on certain aspects of the invasive species issues, illegal fisheries control, immigration and education (which is recognised as long-term), the World Heritage Centre and IUCN conclude that continued effort on all these issues is still required, and that significant progress remains to be achieved for the following three issues:

Invasive alien species: A critical gap remains in efforts to prevent the arrival of new species to the islands. The most likely introduction channel for new species is via the shipping of organic produce from the continent to the islands. Biosecurity control systems remain far from adequate, particularly at the Guayaquil cargo loading docks. The ships transporting the goods are also not optimal in terms of applying effective biosecurity measures. These ships still frequent several ports in Galapagos, unnecessarily increasing the risk of introduction and dispersal of species among them all. The biosecurity inspection agency itself has been strengthened and is well managed, though still understaffed in relation to the number of exit/entry points it must control.

Recommendations:

- i. Establish a single cargo loading port in Guayaquil, with the necessary biosecurity infrastructure and processes in place.
- ii. Commit to replacing, within a clearly established timeframe, the current aging and mal-adapted cargo ships with new ships designed to facilitate the application of biosecurity measures.
- iii. Systematically apply internationally certified bio-security practices, with regular independent compliance audits, at cargo loading and off-loading points, and on cargo ships.

- iv. Institute a capacity-building programme for the biosecurity inspection agency (Agrocalidad) with the support of the highest quality international biosecurity inspection officials, including a focus on dogs trained in detecting organic matter.
- v. Strengthen the budget for Agrocalidad in Galapagos. Consider increasing the inspection fees (currently less than real cost) so that the system may be generously financed.
- vi. Carry out a feasibility study of selecting Baltra as the only Galapagos port authorized to receive cargo directly from the continent, so that international quality biosecurity inspection facilities may be concentrated there and be more effective.
- vii. Ensure that the Villamil air terminal is not put in service as a commercial airport and consider the possibility of dismantling it, or at the very least, converting it permanently to another use.

Tourism: Current high visitation levels are overwhelming the efforts to devise and implement a rational tourism management strategy and system. These efforts also suffer from the absence of a broadly accepted vision for tourism in Galapagos. Authorities responsible for tourism and conservation need the opportunity to devise and implement a sustainable system for tourism in a more stable environment, founded on a clearly articulated vision. This is particularly critical for land-based tourism, where no single authority is in charge. Currently, unregulated land-based tourism and intense pressure to open up sport fishing in a regulatory vacuum have the potential for creating serious threats to the Outstanding Universal Value of the property.

Recommendations:

- viii. Develop and implement a clear tourism vision and strategy for Galapagos, with a focus on establishing mechanisms to discourage rapid and uncontrolled growth in visitation and to guide future decision-making processes.
- ix. Carry out a feasibility assessment for imposing an upper limit to the number of Park entrance permits awarded annually, which would help improve the conditions under which the State Party could develop and implement effective tourism management mechanisms.
- x. Impose a moratorium on the current unregulated practice of “sport fishing” until such a time as i) the official vision and policy for tourism in this property is finalized and, should this allow for sport fishing ii), sufficient scientific evidence is obtained demonstrate how sport fishing could proceed to ensure the property’s Outstanding Universal Value is not compromised (e.g. intensity, seasonality, zonation, licensing).

Governance: significant structural changes to the governance structure of the province are under way. The new (2008) constitution for Ecuador has maintained Galapagos as a distinct province, but has done away with its provincial government and the elected post of provincial prefect. This change is widely seen as positive in the islands, removing one electoral and therefore political layer, according to many comments received by the mission. To replace the provincial government, the constitution calls for a Governing Council (GC) presided by the provincial governor (appointed by the president) and consisting of the three elected mayors of the main settlements in Galapagos and a representative of the small settlements, along with “those authorities responsible for determining the law”. The latter authorities are currently considered to be the ministers leading the ministries of the Environment and Tourism – but the final composition is yet to be formally established. The Technical Director of the GC remains to be hired.

The mission concludes that a clear, transparent and authoritative decision-making body for the Galapagos is in the process of being developed. If sustainable conservation results are to be achieved, it will be critical that the conservation impacts of decisions taken by this body be of prime concern.

Recommendations:

- xi. Ensure clear lines of communication between the Governing Council and the Director of the GNPS in regards to the management of the National Park and Marine Reserve as well as on all policies affecting the Park.
- xii. Effective participatory mechanisms which have been painstakingly developed in the past (e.g. the Junta de manejo participativo) should not be discarded in the establishment of new governance structures. These provide a tried and tested means through which consensus on critical issues can be reached.
- xiii. The recruitment process for the Technical Director of the Governing Council needs to be as fully transparent and competence-based as that of other key positions including the Director of the GNPS and Agrocalidad.
- xiv. Strengthen the judicial processes regarding environmental infractions in such a way as to effectively discourage illegal fishing.

In summary, important measures remain to be completed, though notable progress by the State Party is clearly being made. More time and effort is needed before the effectiveness of the corrective measures currently being undertaken can be assured. It is important to note that while many measures have now been successfully applied, a number of critical activities identified by the State Party are still in the “planning stage”.

The World Heritage Centre and IUCN recommend that continued progress on the corrective measures in general, and demonstrated achievements in regards to these three main issues must be reported before the property is removed from the List of World Heritage in Danger.

Part 1. BACKGROUND TO THE MISSION

1.1 Introduction

Located in the Pacific Ocean some 1,000 km from the coast of Ecuador, the Galapagos Islands need no introduction for their inspiring biological diversity and one of the richest marine ecosystems on Earth. Although discovered in 1535, it is of great importance to note that due to their isolation and scarcity of water none of the islands were permanently inhabited by people until 1832, when a few people colonised Floreana, followed by San Cristobal in 1835. The largest island, Isabela, was only first colonised in 1897, and Santa Cruz, the most populated of the islands today, was only colonised at the end of the 1920's. Human populations on all of the inhabited islands remained low until the past few decades when population numbers (which were less than 2,000 until the end of the 1960's), increased by an order of magnitude.

This late colonisation by people has afforded the Galapagos a respite unequalled by any other group of islands found in the tropics— isolation from humans and from many of their introduced species (although it must be noted that a few alien species were introduced prior to human colonisation, causing some extinctions). However in general there have been remarkably few native species extinctions, and while introduced animals have wreaked havoc on some of the islands, fortunately other islands remained relatively unscathed. The Galapagos consists of 15 main islands and 3 smaller islands more than 1km² in area, plus approximately 107 rocks and islets.

Today, in addition to the current resident population of about 30,000 people, some 173,000 tourists visited the islands in 2008 (although this number dropped to 154,000 in 2009, probably due to the effects of the international financial crisis and to fears of the H1N1 virus). Compared to about 1,000 tourists a few decades ago, this sudden influx of people and the accompanying adverse impacts rightly raised alarm bells by all concerned by Galapagos conservation.

It is important to note that 97% of the total land area of the archipelago is National Park. The remaining 3% of the land area occurs on the five inhabited islands: Santa Cruz, San Cristobal, Isabela, Floreana, and Baltra (a small island close to Santa Cruz which houses the main airport, and used to be home to a US military base during the Second World War). In addition, 133,000 km² of the surrounding marine waters are also managed by the Park (the Galapagos Marine Reserve, or GMR).

Now that there is important human interference in ecological and evolutionary processes, the question is whether human ingenuity can manage the threats that humans are posing to the islands in a more efficient way in the 21st century than has been done in the past. Until recently, threatening processes to native flora and fauna were either unknown or of no concern, resulting in massive extinctions on islands throughout the tropics. The same will happen to the Galapagos if full attention, effort and resources are not applied to avoid this fate. However, if people can learn from history and develop management techniques to both stop any further damage, and remediate as far as possible the damage which has already occurred, then the Galapagos and its evolutionary processes should be conserved for future generations.

1.2 Inscription history

In 1978 the Galapagos was among the first group of properties to be inscribed in the World Heritage Convention (arguably the first property as its number is "1bis"), with an extension including the

Galapagos Marine Reserve (GMR) in 2001. While IUCN recommended that the property be inscribed “under the 1977 Operational Guidelines criteria C. 10(ii) and (iv)”, it is recorded that the Committee decided to inscribe the property under all four natural criteria.

The marine extension was first proposed by the State Party in 1994 under all four natural criteria, but this extension was deferred for a number of integrity issues (see below). The extension was finally inscribed in 2001 after the creation of the “Special Law for Galapagos” in 1998, which was a major step forward towards long-term conservation in Galapagos. The property was inscribed as “Galápagos Islands National Park / Galápagos Biological Marine Resources Reserve”. Management issues for the terrestrial and marine parts are often treated differently, although obviously both parts of the property are closely linked.

Starting in 1994 the World Heritage Committee began to voice concern about the state of conservation of the property for the same reasons that continue to be a concern today, and almost every year discussed the possibility of including Galapagos on the List of World Heritage in Danger. A decision which was finally taken in 2007, with a list of 15 areas of remedial action needed to be undertaken in order to remove the property from the List in Danger, and to assure the future of the Galapagos. To date the property remains on the List of World Heritage in Danger.

1.3 Inscription criteria and World Heritage values

The property, both marine and terrestrial, has been inscribed under all four natural criteria, and both the terrestrial as well as the marine parts of the property offer sterling examples for each criterion. The mission team notes the following attributes for each of the criterion, and recognizes that the Draft statement of outstanding universal value submitted by the State Party is still under review. As such, the following observations are indicative only. Using current criterion numbers:

- vii. Although IUCN did not initially recommend inscription of the terrestrial part of the property as an area of superlative beauty, the assemblage of 18 large and 107 smaller rocks and islets emerging from a “hot spot” in the middle of the Pacific, with still active volcanoes and a striking vegetation composed of giant cacti and daisy trees does make the Galapagos an area of superlative natural phenomena. With its steep-sided volcanic islands descending abruptly into a crystalline sea, it is also considered by many as of exceptional natural beauty. When the marine extension was added it was agreed that the seascape was among the most beautiful and untouched in the world.
- viii. The islands, both above water and below, are still active volcanoes thereby providing a significant on-going example of geological processes in the development of landforms as well as ecological barriers nurturing processes of speciation. Note that the youngest islands, Isabela and Fernandina and at times Santiago, are still exhibiting frequent seismic activity with the most recent volcanic eruption on Fernandina in April 2009.
- ix. Given their almost pristine nature on some of the islands, the Galapagos is one of the few places on Earth where significant on-going ecological and biological processes in both plant and animal evolution have been recently demonstrated (Weiner, 1994). In addition the Galapagos are almost synonymous with evolutionary processes, given the enormous historical contribution they made to Darwin’s theory of evolution after his visit in 1835. The same argument was made with the inclusion of the near-pristine marine reserve.
- x. This was the main criteria recommended by IUCN in 1978, saying that “The islands’ significant concentrations of plants and animals which are rare or endangered justify the inclusion”. The islands have a high diversity for such young oceanic islands, and contain emblematic taxa such as giant

tortoises and land iguanas, the most northerly species of penguin in the world, as well as the historically important Darwin's finches. Endemic flora such as the giant daisy trees *Scalesia* spp. and many other genera have also radiated on the islands. Likewise the marine fauna has an unusually high level of endemism. The interactions between the marine and terrestrial biotas (e.g. sea lions, marine and terrestrial iguanas, and seabirds) are also exceptional.

In summary, a robust case for both the terrestrial and marine portions of the property can be made for all four natural criteria.

1.4 Integrity issues raised in the IUCN evaluation report at time of inscription

At the time of first inscription, IUCN further noted for the Galapagos that "the boundaries of the proposed area were not clear, the bibliography was inadequate, and that the support of the Director of national parks was not indicated and in essence he will be the management authority". While the boundaries of the proposed area became clearer (in effect all of the islands as well as the marine area out to 40 nautical miles were inscribed), the governance issues are still an issue. More integrity issues were raised in 1994 when the marine extension was proposed. These included:

- Overfishing and illegal fishing of a wide range of species
- Human pressures from the local population (growing at an estimated rate of 8.5% per year, mainly due to immigration) and tourism on both terrestrial and marine resources;
- Inadequate management capacity and infrastructure;
- Adverse impacts of introduced animals and plants.

The committee called for action including:

- Augmenting management capacity;
- Encouraging institutional cooperation;
- Stepping up law enforcement, and
- Conducting research on sustainability of resource use in the Marine Reserve.

1.5 Examination of the State of Conservation by the World Heritage Committee and its Bureau

Since 1994 there has been a State of Conservation report for the Galapagos almost every year, and they all focus on the same issues which culminated in the 2007 Decision to inscribe the property on the List of WH in Danger. Fifteen corrective measures were determined in order to remove this property from the List in Danger. Progress made on addressing these issues will form the basis of this report.

1.6 Mission Mandate

World Heritage Committee Decision **33 COM 7A.13** requested the State Party to invite a joint World Heritage Centre/ IUCN reactive monitoring mission to assess progress made on the implementation of the decisions of the Committee (see full text, annex 1). This decision also requested the State Party to submit a comprehensive report on the state of conservation, with particular emphasis on the identified corrective measures in its 15 point Action Plan and on its response to land based visitation trends, by 1 February, 2010. This report was received in March, 2010. This report lists progress on each of these

identified corrective measures made by the State Party of Ecuador, sometimes in association with a number of NGOs, as well as additional activities undertaken to ensure the conservation of the property.

Part 2. NATIONAL POLICY FOR THE PRESERVATION AND MANAGEMENT OF THE WORLD HERITAGE PROPERTY

2.1 Protected area legislation

In 1936 the government of Ecuador established the Galapagos National Park and started to implement a limited number of conservation measures. The Park was then established by Presidential Decree in 1959, covering 97% of the terrestrial territory of the islands. In 1978 all of the terrestrial territory, including both the Park and the inhabited areas, was declared a World Heritage Site. In 1986 the government of Ecuador declared the Galapagos Marine Reserve (GMR), covering 70,000 km² which was extended to cover 133,000 km² in 1998.

At the same time a landmark law, called the “Special Law for Galapagos” (LOREG), was enacted. This law establishes the legal framework over which many aspects of island life are to be regulated, including regional planning, inspection and quarantine measures, fisheries management, residency and migration, tourism, agriculture, and waste management. A central coordination agency called INGALA (the “Instituto Nacional para Galápagos” or the Galapagos National Institute) was created to act as the central technical planning authority. Also created in this law was the “Autoridad Interinstitucional de Manejo” or Inter-institutional Management Authority (AIM), which was developed to manage the huge marine area (about the size of Greece). This Authority consists of four Ministers or their representatives (Environment [president of AIM] and National Defence, Foreign Affairs and Tourism); the Provincial Chamber of Tourism; and representatives from the fishermen, conservation, science and education sectors. The Director of the National Park acts as Technical Secretary to this authority.

The Special Law of 1998 was developed under the framework of sustainable development for the people living on the islands, incorporating participative and adaptive management in order to achieve conservation goals. Included in this law was the concept of “total control” of introduced species, anchored in the precautionary principle. While it withdrew many rights that Ecuadorians would enjoy on the mainland (such as posing restrictions on immigration, imports of goods, where they can live and even keeping of pets etc.) at the same time it strove to provide compensation to the people living in such a fragile environment, such as providing subsidies and allowing legal residents fishing and tourism rights not available to non-residents.

While the LOREG provides a legal framework, it relies heavily on follow-up regulations to spell out in detail exactly how the law is to be applied. Perhaps the most important regulation is the “Reglamento Especial de Turismo en Áreas Naturales Protegidas” or Special Tourist Regulation in Protected Natural Areas (RETANP). Also four Management Plans for the Park have been prepared since 1974 with the latest management plan in force from 2005. These incorporate all the forestry, fisheries, tourism and other laws and are developed in a participative manner. For marine issues the “Junta de Manejo Participativo” or Participatory Management Board (JMP) was created to provide a forum for the users of the Galapagos Marine Reserve, in order to create effective participation and responsibility on the part of the users with respect to the area’s management and to advise the AIM. The JMP includes representatives of the local fishing sector, Galapagos Chamber of Tourism, the GNPS and CDRS.

Finally it must be noted that Ecuador adopted a new Constitution in October 2008, which has resulted in needed amendments to the Special Law. The most critical aspects relate to the abolition of the provincial government (while Galapagos will remain a province, it no longer has an elected provincial governor), and of INGALA. The mandates of these two have been fused, and are now implemented by the constitutionally-created Governing Council described below.

2.2 Institutional framework

Many institutions have decision-making powers that affect conservation values on the Galapagos, and herein lies perhaps the greatest challenge to the long-term management of the property. The institutional framework and interactions between these institutions is highly complex, and has been identified as a main reason for the at times chaotic development that Galapagos is undergoing today. It is clear that a simpler, more transparent and accountable system of inter-institutional coordination, anchored in the legal framework which is the Galapagos Special Law, is required if the current issues affecting the property are to be addressed. Governance issues are discussed in more detail under section 3.2.6 below. However the most important institutions related to the property are those which receive a portion of the Park entrance fee. These are:

1. The Galapagos National Park Service (the Director reports directly to the Minister of Environment)
2. The Governing Council, (presided by the Governor of the province who is appointed by the President of Ecuador). This institution has taken over the role of INGALA and of the provincial government, both of which were abolished when Ecuador adopted its new Constitution in 2008.
3. Two elected representatives to the national assembly,
4. The municipal government. The Province is divided into three cantons, each with an elected mayor.
5. Agrocalidad. The service of the Ministry of Agriculture in charge of biosecurity measures in Galapagos and on the continent
6. The navy, which received part of the Park fee and participates in patrolling the enormous GMR.

Other important actors include the Ministries of Tourism and Agriculture. There is a \$100 Park fee levied on all international visitors (with lower fees for visitors from Latin American countries and lower still for Ecuadorian nationals). This fee is divided up between different institutions identified in the Special Law. The current Special Law divides the fee up as follows, and proposed although not yet final amendments to the Special Law are included in table 1.

Table 1. Repartition of the Park fee

Current division in Special Law	Proposed amendment
1. Galapagos National Park 40%	1. Galapagos National Park 45%
2. Municipalities of Galapagos 20%	2. Municipalities of Galapagos 25%
3. Provincial Council of Galapagos 10%	3. Governing Council 20%
4. Marine Reserve of the Galapagos Province 5%	
5. INEFAN -for the National Protected Heritage Area 5%	
6. INGALA 10%	
7. Inspection and Quarantine System of the Province of Galapagos 5%	4. Inspection and Quarantine System of the Province of Galapagos 5%
8. National Navy 5%	5. National Navy 5%

The main change to the Special Law proposes merging the sum for INGALA and the Province, so that the Governing Council will receive 20%. The process for amending the Special Law has now taken a year and a half and should be completed in the next few months. During this time it must be recognised that the Galapagos has been undergoing, and is still in, a transitional phase as the integration of the provincial government and INGALA mandates is completed and especially as the new Governing Council becomes more settled in its functions.

It is important to note that Agrocalidad (previously known as SESA – Sistema Ecuatoriano de Sanidad Agropecuaria), reporting to the Ministry of Agriculture, is the national agency responsible for the inspection and quarantine system on the island. Its mandate is to prevent new arrivals of alien species, monitor for possible new invasions, and carry out rapid responses to eradicate them before they become widespread. Agrocalidad manages the “System of Inspection and Quarantine of the Galapagos” programme (SICGAL) and receives 5% of the Park entrance fees to contribute to this service. The system was designed and initiated in the late 1990’s and early 2000’s (largely with the financial and technical support from the CDF), and inaugurated in 2001. The old acronym of SESA is still on the inspection stickers. There is also a system in place for charging boat and aircraft inspections, based on value of merchandise being inspected. Agrocalidad has a \$1.6M budget of which \$250K come from fees for processing goods being shipped to Galapagos. Currently the Agrocalidad SICGAL programme has approximately 40 highly trained technicians working at the eight Galapagos entry points (air and sea ports), and out of the Quito and Guayaquil airports and the Guayaquil sea port where cargo ships are loaded. The objective is to have all shipments of goods to Galapagos subjected to inspection and potentially decommissioned by these inspectors.

A number of NGOs, including the Charles Darwin Foundation that has worked on scientific and management research on the islands since the inception of the Park, local chambers of tourism which promote and regulate tourism, as well as a number of fishing cooperatives also participate in management decisions. In particular, it is important to note that the tourist industry is the main economic driver on the islands (and thus the main driver of overall change), and as Watkins and Martinez (2008) point out, over 20 institutions play a direct or indirect role in tourist management. In addition to the GNPS, these institutions include the President’s Office, Assembly and Congress; Ministries of the Environment, Coordination of Natural and Cultural Heritage, and Tourism; Provincial Directorate of Tourism and local tourist boards, Municipal Councils, Governor’s Office, Inter-Institutional Management Authority, Participatory Management Board, Port Captains, Merchant Marine, Transportes Aéreos Militares Ecuatoriano (TAME), Civil Aviation, Navy and the Ministry of Defence. Therefore while the institutions receiving the Park fee are the most important concerning policy and management of the property, at the same time there are a number of other institutions that play a role and must be taken into account.

2.3 Management structure

While a number of institutions described above affect decisions concerning the Park, the institution that is mandated to manage the Park is still the Galapagos National Park Service, and the GNPS reports directly to the Minister of Environment. The Director at the time of the mission had been in office for the past two years, although on June 8, 2010, he was replaced by the previous head of the GNPS tourism department. The Director is supported by 18 professionals at top management level, covering all areas from empowerment (legal, internal audit, public relations, planning); technical (island restoration, marine conservation, sustainable use, tourist management, communication, environmental education

as well as the managers for the satellite Park offices on San Cristobal, Isabela and Floreana); and administrative (human resources, institutional and technical services, finance and documentation). An organigram of the GNPS is available at http://www.galapagospark.org/nophprg.php?page=institucion_estructura_directorio, and the 2009 directory lists 240 Park staff. The mission met with the GNPS staff on one of their monthly meetings and was impressed by the number and competencies of the assembled staff.

Through pre-established, transparent technical processes, the GNPS determines who receives scuba, inter-island transport, bay tour, and artisanal fishing concessions. The GNPS also develops and controls cruise ship itineraries, accredits new naturalist guides, polices the Park in cooperation with the Navy and Port authority, and develops policies, working with Agrocalidad (described above), on the issue of invasive alien species prevention. The GNPS also works closely with the Charles Darwin Foundation (CDF), created at the same time as the Park with a mission to assist in the preservation of the remarkable flora and fauna of the islands. The tandem GNPS and CDRS have been instrumental in many world-class conservation successes and continue to work closely together.

Since the creation of the GNP four management plans (in 1974, 1984, 1996 and 2005) have guided conservation and management activities. The most recent Park Management Plan, as noted by the GNPS, “highlights a philosophical change from a primary focus on natural resource management and conservation to a broader focus on the need to manage the entire Galapagos Archipelago, both land and sea, under a unified shared vision for both conservation of the natural resources and sustainable development of the human communities”. The GNPS has six main management programmes:

1. Conservation of ecology and biodiversity;
2. Coordination of the ecosystem model with regional planning;
3. Institutional strengthening;
4. Provision of support to the human communities of Galapagos;
5. Research; and
6. Scientific cooperation at both national and international levels.

The GNPS is responsible for the administration of the GMR and oversees a participatory management framework that includes the main stakeholders, primarily the tourism industry and the local fishing sector. A management plan for the GMR was completed in 1998 and includes fishing regulations. The Park has four primary units focused on the GMR:

1. Management Coordination
2. Control and Surveillance
3. Fisheries and Monitoring
4. Marine Research

To better manage use within both the GMR and the GNP, the GNPS has developed a zoning system to regulate use and ensure conservation.

2.4 Response to the recognition of values under international treaties and programmes

The Galapagos was also designated as a Biosphere Reserve under the UNESCO Man and Biosphere Programme in 1984 and the “The Humedales del Sur de Isabela” was designated a Wetland of International Importance under the Ramsar Convention (872 ha). The terrestrial GNP is designated

under IUCN Protected Area category II (National Park) and the GMR under category VI (Managed Resource Protected Area). The International Maritime Organisation (IMO) declared the GMR a “Particularly Sensitive Sea Area” (PSSA) on 2 April, 2004.

Part 3. RESPONSE TO CORRECTIVE MEASURES

3.1 Management Effectiveness

Management can be measured by examining the main threats and issues to the property which have been recorded in previous World Heritage reports, and examining progress made to address these threats, for which 15 corrective measures were developed (originally listed in Decision **30COM 7B.29** in 2006, and repeated in WHC-08/32.COM/7A in 2008 and WHC-09/33.COM/7A in 2009). The main issues are:

- i. Invasive alien species (prevention and control)
- ii. Fishing (illegal and efforts to make legal fishing sustainable)
- iii. Tourism (both land- and ship-based)
- iv. Immigration (correct implementation of the Special Law)
- v. Education (the need to develop local capacity)
- vi. Governance (the need to denote clear authority, providing transparency and accountability, in particular with respect to regional planning which was identified as inadequate).

The 2010 State Party State of Conservation report provided an update on the many activities that the State Party is implementing in respect to the 15 corrective measures developed to address these issues, as well as noting advances in the areas of agriculture, health, and classic restoration activities, many projects of which Galapagos has been cited as being a world leader.

In terms of management effectiveness, there have been positive trends for each issue although unfortunately some challenges still need to be addressed (see more detailed reporting on each issue in the section below). It is clear that more progress needs to be made in order to reach the level where the corrective measure will have a measurable impact on the state of conservation of the property. This could be summarised as things are mostly on the right track, but more time and effort is needed before the effectiveness of the corrective measures currently being undertaken can be assured. It is important to note that while many measures have now been successfully applied, a number of critical activities identified by the State Party are still in the planning stage.

The Galapagos has been undergoing a period of rapid growth and change for the past 15 years now. Decisions made and measures implemented over the next decade will be instrumental in determining whether the future outlook for the property is positive, or whether the risk of many extinctions, which would irreversibly compromise the OUV for which the property was inscribed, is heightened.

3.2 Nature and extent of issues/threats affecting the property

The nature and extent of threats to the property have been well recognized, and as noted above 15 corrective measures were developed to measure progress in addressing these threats. The State Party in their 2010 State of Conservation (SoC) report rearranged these 15 corrective measures into a more logical order to report back on their activities, which has been followed in this report. The mission

examined progress made on each corrective measure, noting findings and suggesting further action needed to strengthen management.

3.2.1 Invasive alien species (prevention and control)

a. Reducing the number of access points to the Galapagos, by sea and by air, to decrease the possibilities of new species being introduced.

The State Party reported on reducing “access points” to three: two airports (Quito and Guayaquil) and one port (Guayaquil). The fact that aircraft no longer arrive from Cuenca or ships from Manta is very positive. However “access points” include both exit and entry points, and the State Party only reported on “exit points”. As a number of other vessels such as private yachts arrive directly to the Galapagos, reducing the number of “entry points” in order to improve control is also essential. Currently there are eight access points (i.e. “entry points”) in Galapagos that receive ships or aircraft directly from the mainland: Baltra (air and sea), Santa Cruz (sea), San Cristobal (air and sea), Isabela (air and sea) and Floreana (very occasionally by sea).

The other issue is that a large airport terminal at Villamil on Isabela Island was constructed in 2006, although apparently the runway is not long enough to welcome commercial aircraft from the mainland. Currently (occasional) air force supply planes and private jets may use the landing strip, and a small (9 passenger) inter-island commercial service uses it daily. Transport authorities assured us that any traffic other than the current small military, private, and commercial inter-island planes will not be allowed.

For air transport, there is good progress in that flights can only come from Quito or Guayaquil. However entry from the mainland should ideally only be allowed at Baltra. Direct air transport to the airport in San Cristobal, if absolutely necessary, should only continue as long as the biosecurity inspection capacity there is maintained at identically high standards as that proposed for Baltra. The mission received reports of occasional “exceptions” for direct air access to Galapagos from points outside of Ecuador, particularly for VIPs. No exceptions should be made.

For sea transport, more work is needed as yachts and other vessels can enter the islands through five entry points. Recommended that the only entry from the mainland by sea be at Baltra, where top level biosecurity inspection could be carried out, before proceeding to any other island. Awareness among yacht agencies organising yacht itineraries need to be increased about the special requirements for all vessels entering the GMR. For example during the mission’s visit a yacht with a dog on board was present despite regulations banning dogs from the GMR, even if they stay on the boat.

Cargohandling is the weakest link in the biosecurity control chain, and Baltra is currently the only port in Galapagos suitably equipped to receive incoming cargo in terms of offloading facilities. This is also where cruise ships come to re-fuel. Baltra is a small, very arid island and would by its nature represent an important barrier to the introduction and establishment of any species that could eventually arrive by ship onto land. Baltra also hosts a small military base which is in charge of running the main airport in Galapagos, also located on Baltra. The mission noted some discussion over the use of Baltra as the only authorized entry point for all incoming ships, and the only deep water dock where cargo from the continent could be offloaded. There are alternative scenarios, where important construction works in the towns of Puerto Ayora, San Cristobal and Villamil would be carried out to equip them with port infrastructure suitable for direct offloading of cargo ships onto land. Currently this is done by transferring cargo by hand onto barges, and then offloading barges at the town docks. However, the construction of docking facilities suitable for the offloading of cargo would require major investments

with important environmental and aesthetic impacts, and would result in the presence of infrastructure and activities that would be completely incompatible with the tourism vocation of the harbour fronts in these towns. For this, and other reasons, the use of Baltra as the only off-loading facility for incoming cargo is likely the optimal approach. Once cargo has passed inspection in Baltra, it could then be re-directed in smaller ships with smaller drafts facilitating the delivery of supplies to their respective final destinations.

The unsatisfactory situation concerning the airport at Isabela needs to be resolved. The construction of an airport terminal in 2006 designed to handle hundreds of passengers sends a clear message contrary to the World Heritage Committee request to reduce, and not increase access points. Though the terminal is not completed and is but an empty shell at this point, its very presence sends a powerful message that Villamil may soon begin to receive commercial flights from the continent. The State Party assured the mission that this was not going to happen. However, the mission was informed of powerful players with financial and real estate interests in Villamil, having a stake in the eventual opening up of Villamil to commercial air traffic from the continent. Given the commitment of the current administration not to support commercial service to Villamil, the mission recommends that the State Party consider converting the partially finished airport terminal constructed in 2006 to another use, or, ideally, dismantling it completely.

Progress on recommendations: some reduction, but the current number of island “access points” remains worrisome. “Access points” (meaning both “exit” and “entry”) still need to be reduced in order to concentrate limited biosecurity inspection infrastructure and services so that they may most effectively prevent the arrival of new species to the islands. There are still eleven access points to the island and this number needs to be reduced significantly. The mission believes that this number could be effectively reduced to three access points by air and two by sea.

b. Applying regulations on inspecting and fumigating aircrafts.

Both the State Party report as well as Agrocalidad reported that strict inspection and fumigation procedures have been put in place for all aircraft. Therefore this corrective measure seems to have been implemented. It needs to be confirmed that these strict measures are being complied with for private aircraft as well as on commercial flights.

c. Applying quarantine measures and biosecurity practices in cruise ships and freighters both between the islands and between the mainland and Galapagos.

Although the State Party reported plans for a dedicated cargo loading facility at Guayaquil dock yards, this is still in the planning stage. Currently, three different cargo loading facilities (TIMSA, Caraguay and South Naval Docks) are being used by seven ships. None meet the requisite biosecurity inspection standards, and experts indicate that the very design of these ships render effective controls very difficult. One NGO, WildAid, has begun working with the TIMSA cargo port in the acquisition of necessary biosecurity inspection infrastructure, and in the design and construction of proper cargo loading and storage facilities. For the sake of efficiency, the government should require that all cargo bound for Galapagos be loaded in dockyards equipped with the necessary infrastructure, meeting international standards and undergoing regular third party audits on the application of biosecurity measures.

The seven ships that transport cargo to Galapagos consist of medium-sized and ageing (between 28 and 56 years old) vessels never designed to facilitate the application of modern-day biosecurity measures. A clear time-bound strategy to replace these ships with fewer, larger, and more modern ships facilitating the application of biosecurity measures is required. WildAid has carried out a useful feasibility study in this regard.

The “Optimal System of Sea Cargo Transportation” and the Decision by the “National Direction of Aquatic Species” (DIRNEA) for freighters to undergo hull inspection at Guayaquil to prevent the introduction of hull-incrusting organisms is very positive. Also positive was that it was reported that since August 2009, three of the seven authorised cargo vessels were forbidden entry to Galapagos as they did not comply with these stricter measures and were then forced to comply.

However the mission was informed that there is still low compliance with regulations concerning the elimination of “black water” and other toxic wastes such as oil by cruise ships, plus there was one account of a Peruvian naval vessel being allowed into the GMR despite being single-hulled and carrying illegal bunker fuel. This ship subsequently grounded in the town of Puerto Ayora, but fortunately no oil spill ensued. Such exceptions to sound regulations undermine other efforts from the State Party, in particular the positive measure reported by the State Party that from the start of 2009 the only tanker supplying fuel to the Galapagos is “Isla Puna”, which is double-hulled and fulfils the law for dangerous substance transport.

Progress on recommendations: Current measures need to be continued and strengthened. The specialised cargo dock project at Guayaquil needs to be implemented and should include remedial action when hull-incrusting organisms are detected on ships. Monitoring is needed to ensure that ballast water elimination or treatment system before travel to Galapagos is undertaken. The issue of dumping wastes including black water into the marine reserve also needs to be monitored and reduced. Although technical specifications for biosecurity purposes have been clearly identified and are now required to be adopted by the seven cargo ships carrying goods between the continent and the islands, there is no clear timeframe for when these will be firmly in place. Moreover, the mission was informed that these measures are difficult to apply and will be in part ineffective in cargo ships not designed to facilitate their application. A clear timeframe, with penalties, needs to be adopted for the existing ships, and a strategy for the replacement of these ships with modern vessels is required.

d. Ensuring that cabotage boats meet the basic conditions for cargo and food transportation, decreasing the risk of introduction of invasive species.

Cabotage boats, used for inter-island transport, are subject to the same biosecurity rules as cargo ships arriving from the mainland (hull treatment, ballast water elimination systems) and the State Party report noted progress on managing different sorts of cargo to reduce the risk of accidental species introductions. However the mission did not inspect any cabotage boats. One serious issue is that some of these cabotage boats are reportedly stopping illegally at tourist landing sites along their journey, which would greatly increase the risk of transporting alien species to pristine areas.

Progress on recommendation: continue progress on ensuring that cabotage boats follow the stricter biosecurity measures developed for all cargo vessels. If it is the case that cabotage boats are not following their authorised itinerary, this needs to be stopped.

e. Counteracting opportunities for the dispersal of invasive species through movement of people and freight between islands and between the mainland and Galapagos.

The State Party reported on a number of activities aimed at fulfilling this measure:

1. Plans for a separate cargo port at Guayaquil discussed in point (c) above.
2. Agrocalidad presented their system of providing a license and identification card for all importers of organic cargo, making them responsible for importing produce in good condition. If an importer fails more than once to follow the rules and regulations, this license is taken away. The ID card system for each importer facilitates control.
3. Increased rules on how imported cargo is packaged, and plans for improvements of dock facilities to reduce staying time of cargo ships in the archipelago.
4. The use of electronic insect zappers and reduced lighting on boats in an effort to halt insect dispersal between the islands, including the application of a plastic film over ship windows to reduce luminosity at night. Tourist itineraries also been studied to avoid spending the night on an inhabited island prior to visiting a pristine area.

The mission also noted upon arrival to every inhabited island that a hand baggage inspection was carried out, and hands and soles of shoes were sprayed with alcohol (to control the H1N1 virus). A trained dog inspects luggage at Baltra (for drugs) and Isabela (for drugs, sea cucumber and shark fin), and we were told that there was a dog also at San Cristobal but did not see one. However, apparently no dogs are currently trained to detect plant and other animal matter, which are the primary imports of concern in terms of invasive species.

It is recommended that the same protocols used in places such as New Zealand (where concern over introduced species has resulted in a decades long effort to establish procedures minimizing the risk of arrivals) be used in Galapagos, which includes x-ray machines at all entry points, dogs that can detect plant and animal matter (not just sea cucumber and shark fin), a fumigation facility at every entry point for any suspect material (like muddy boots), and stricter rules on what individuals can import. Most important is increased sensitization and buy-in of Galapagos residents for these stricter regulations and increased penalties if the rules are broken. Currently there is a very complicated list of prohibited, restricted and permitted vegetal matter allowed to the islands and not all authorities have a clear understanding of their application. But most of all, the general population needs to understand the consequences of bringing in alien species to the islands. The State Party reported plans on installing an x-ray machine for arriving passengers at Baltra but this is not yet in place. As stricter facilities are needed at all entry points, this brings us back to point (a) in that entry points need to be reduced so that resources can be concentrated on developing better inspection points.

Progress on recommendations: The problem with prevention is like that of any maintenance task –the results go unnoticed when the work is done well. It is only when maintenance is poorly done, or not done at all, that the impacts are remarked. The measures taken to date are good, but given the high volume of movement of people and goods there will always be problems of introductions. Agrocalidad showed us a number of potentially invasive aliens that had been detected in their inspections and the statistics on material that had been confiscated before entry. However despite these successes, the recent introduction of a species of ladybird that has been introduced unintentionally since 2007, and the even more disturbing recent arrival of the Giant African Land Snail *Achatina fulica* to Santa Cruz (first

detected in February 2010) means that while progress is good, there still need to be stricter control measures.

f. Increasing staff and infrastructure at departure points on the mainland and entry points on the Galapagos for effective inspections.

As noted in point (e) above, the mission observed well-trained inspectors and x-ray equipment at departure points and inspectors searching bags at entry points, which is all very positive. However the same recommendations for point (e) are needed here. While inspections are in place, in order for them to be effective the “New Zealand” type protocols need to be followed including an x-ray machine for all incoming goods, fumigation facilities, trained dogs, and most importantly clear information to all incoming passengers, with warnings of fines and a bin available for all passengers to dispose of any illegal material prior to inspection. In particular an educational campaign to local residents about not bringing in any foreign matter, especially seeds, is needed. The brochure on what organic matter is and is not permitted is not clear. This needs to be revised and made simpler. A capacity-building programme with experienced custom officials (such as those from New Zealand) would be helpful. Until these measures are in place, even if a greater number of inspectors are hired, species will continue to be introduced which will not be detected by the current inspection system.

g. Building capacity for early detection and eradication of invasive species arriving from the mainland or other islands.

Capacity is certainly being built on the island for early detection and eradication of invasive species arrivals, and a good test case will be what happens with the recent introduction of the Giant African Land Snail. The State Party also reported on the possible eradication of Big-headed Ant (first detected in 2008) from Santa Cruz and control on San Cristobal, and the probable eradication of the Mediterranean Fruit Fly (first detected May 2008). The mission learned that upon first detection of the Mediterranean Fruit Fly, no emergency was declared. This resulted in the lost opportunity to mount a rapid response and to impose strict quarantine measures. Having responded more quickly with maximum resources may have helped control the spread of the fly at the outset. The mission team notes the importance of the lessons from this incidence. The mission team notes that amongst other mechanisms, there is a dedicated Rapid Response Facility (www.rapid-response.org) for World Heritage Sites, which could provide small grants within days for such emergencies.

Tilapia, an African fresh water fish was recorded in 2006 as introduced to El Junco Lake in San Cristobal, and were eradicated by 2008 (Carrión, 2009). Agrocalidad showed the mission some very interesting photos of insect species that they had stopped in cargo shipments. Capacity to detect and eradicate invasive species is definitely improving, and needs to be continued. However, these depend on the presence of stable, professionally led institutions, with the capacity to access potentially large budgets when necessary.

Other activities

1. The State Party also reported on other relevant invasive species control and eradication activities, including goat, donkey, cat, rat and fire ant control and eradication activities. The confirmation of the eradication of goats from the entire island of Isabela (last seen in 2006) is a remarkable achievement and deserves recognition as a conservation success story of global significance. Work is also reported to

be ongoing in the populated islands to control pets and domestic animals as well as rodents and insects. However the mission observed free-ranging chickens everywhere in the agricultural land. If ever the Galapagos Hawk is to return to Santa Cruz after disappearing relatively recently from this island (the mission was told that this was due to persecution from people), all chickens should be housed in chicken coops and strict penalties for killing hawks need to be implemented. If indeed this species has disappeared from Santa Cruz due to human pressure, with education it should be possible to restore it to its native range.

2. The “Galapagos Invasive Species Control Fund” (FEIG) is an initiative to create an endowment fund of US\$15M. The interest earned will be used to ensure that eradication projects have funding to the very end (the period which is most crucial to the success of any eradication effort but also the time when it is most difficult to find funding), as well as to finance long-term control measures. The fund has not yet reached its capitalization target and currently stands at US\$12.5M. The government of Germany (KfW) is studying various options in its cooperation with Ecuador, and may contribute to the Fund. It is expected that the technical director to the FEIG, based in Puerto Ayora, will be appointed in the next few months and the first portfolio of projects developed. The first disbursement of project funds is expected to start at the end of 2010.

3. Rationalising agriculture on private land has several implications for the management of alien invasive species. First, if more food is produced on the island, this reduces the need to import it from the mainland with the increased risk of importing invasive species along with it. Second, private land under cultivation reduces the source of some invasive species such as *Rubus* spp. (blackberry) and *Psidium guayava* (guava), as these invasives thrive on abandoned agricultural land and serve as an alien source for invasion into Park land. With better cultivation practices, less “waste” land will be available for invasive plant species to colonise (although any “waste” land should be restored to native vegetation if cultivation is impossible). Finally, the increasingly rapid conversion of the better agricultural lands to urban subdivisions, or to non-farm uses for the expanding human population on the islands may pose a concern. If local agricultural production is to be part of the solution to reducing the risk of invasive species arriving in Galapagos, it will be important to protect this resource over the long term. The State Party reported on a strategy to reduce the dependency for continental products by improving local agriculture, and the mission visited a coffee plantation growing under a mixture of native and non-invasive non-native trees, as well as greenhouse trials using drip irrigation. The mission was pleased to note that the green house and drip irrigation technology appeared to be in the phase of appropriation by farmers, thus moving beyond the demonstration phase. It is important that local initiatives to improve agriculture are not hurt by produce being subsidised from the mainland (e.g. through subsidized transportation costs, or subsidized biosecurity inspection fees), which will create a disincentive to produce fruit and vegetables locally.

3.2.2 Fishing (illegal and efforts to make legal fishing sustainable)

h. Regulating recreational fishing activities.

The State Party reported on the development of the only allowed recreational fishing activity which is called “pesca vivencial”, or “artisanal fishing”. The idea is to provide local fishermen with income by allowing them to take tourists out on short fishing outings (e.g. a few hours) to fish and to experience their “culture and lifestyle”. Loans have been provided to three fishermen to upgrade their boats in order to welcome tourists on board, with four other loans pending. According to Park regulations “sport

fishing” i.e. fishing for billfish like marlin is prohibited, but “artisanal fishing” is allowed. The State Party reported that 21 boats are licensed to undertake “artisanal fishing”.

However there is clearly a problem with definitions on what constitutes “sport fishing” and “artisanal fishing”. In December authorisation was sought by a consortium of foreign and national interests for a “Sport Fishing tournament”. They proposed a tour package focused around taking sport fishing enthusiasts out to catch as many bill-fish as possible over a 4 day period. The Park duly refused to authorize it, noting that the absence of scientific information on the population dynamics of the target species was not yet available, which made it impossible to establish clear regulations assuring the sustainability of the activity. The organizers returned weeks later, and, under the guise of “artisanal fishing”, sought the authorization to carry out exactly the same activity, but this time, taking into account boat ownership considerations (e.g. for artisanal fishing, the boats must be owned by a registered Galapagos fisherman). The Park authorized it as an “artisanal fishing tournament” despite the fact that the “culture and lifestyle” of local fishermen, which is the foundation of artisanal fishing, never consisted of competitions between themselves to catch as many swordfish and sailfish within a set period of time. In the view of the mission, this incident illustrates how a small, but influential interest group was able to circumvent Galapagos National Park regulations with relative ease and with apparently little resistance from the authorities charged with managing the marine reserve.

Currently sport fishing is openly advertised to tourists in the Galapagos (the State Party report actually refers to the website www.galapagosfishing.com which says that they are the only “sport fishing” company allowed to operate in Galapagos; also note that their section on “fishing rules” is “still under construction”). There is a real conflict here between major international sports fishing interests allied with a few local stakeholders, and the Park rules.

Sport fishing is a major departure from long held tourism approach, and should be considered in light of potential impacts on the image of Galapagos as a nature tourism destination. Other iconic World Heritage sites have eschewed extractive tourism activities (Serengeti) for this reason. Moreover, given the global reach and economic importance of sport fishing, the mission expressed grave concerns over the risk that allowing this activity, even on a restricted basis, would eventually result in the development of a powerful lobby focused on the ever expansion of sport fishing in Galapagos. The mission also noted that sport fishing can be practiced in waters all over the world – whereas nature tourism of the type traditionally practiced in Galapagos cannot be done anywhere else, further supporting the argument that sport fishing may not be an appropriate activity in this World Heritage property.

Progress on recommendation: As noted, there is progress as 21 licenses for artisanal fishing have been awarded. However, the exploitation of artisanal fishing for the pursuit of organized international bill-fishing tournaments, and the way the reversal on the part of the GNPS took place, represents an important backsliding on the regulation of fishing activities in the property and is a matter of concern for the mission.

i. Counteracting the overexploitation of fish resources and providing opportunities for alternative employment for the small-scale fishing sector.

It must be noted that local inhabitants as well as tourists will always eat fish, and small-scale sustainable fishing is not incompatible with the values of the Park. The State Party reported on strengthening fishing cooperatives by providing training to enable fishermen to better do their job as well as helping them to become more efficient by using fish aggregation devices. The State Party also reported on helping

fishermen diversify their activities so that some fishermen can integrate in the tourism sector (such as taking tourists out on fishing trips described in point (h) above, training to become scuba diving leaders, or even becoming engaged in beach cleaning). Given that both the sea cucumber and lobster fisheries have become commercially less important after 15 years of over-exploitation often in disregard of institutional efforts to regulate these fisheries (e.g. the sea cucumber fishery was closed in 2009 to allow recuperation of severely reduced stocks), there is a clear need to ensure that the same result is not allowed to happen to the current small-scale fishing in operation.

A positive development in combating the overexploitation of fish resources is the development of a "Satellite Vessel Monitoring System" (SVM), in which every Ecuadorian vessel over 20 BTR ("brut tonnage register") is equipped with a device so that its exact location can be monitored both inside and outside the reserve (plans to equip vessels of all sizes are mentioned in the State Party report but with no mention of when). The mission was also told that it was scheduled to include vessels from other countries in the coming year. This means that currently the trajectory of all fairly large Ecuadorian boats, including tourism ships (but not ships flying under a different flag) can be monitored and any illegal activity (such as entering the GMR or visiting islands without authorisation) can be quickly noted. Already thanks to the SVM system, several ships have been apprehended.

During the mission two fishing boats with 63 crew (the Papete and Nicol II) were caught inside the Park with reportedly 180 shark fins, and all the crew housed in the jail on Santa Cruz, though the mission was informed that these had been the first ships captured in several weeks. It seems that the Navy apprehended these ships and it is a positive sign that they were caught, but a negative sign that illegal fishing is still occurring. Reports of illegal fishing along the margins of the reserve is also still occurring (the mother boat stays outside the reserve boundary, but smaller boats enter the reserve to fish, and these cannot be tracked by the SVM system). Two tourists also told the mission team that one had seen a dead turtle strangled by a net, and another saw a shark fin floating in the water as he was snorkelling. While these are isolated incidents, to hear of two when speaking with only three tourists is disturbing. In addition to the above, the mission took note of common criticisms over a judicial process in which environmental crimes are not considered serious by judges, and very light penalties imposed. Given that the authorities (GNPS and the Navy) invest vast sums of money and resources in patrolling and apprehending illegal fishing operations, it is incumbent upon the judicial arm of the same government to play its part in ensuring that such activities be discouraged as much as possible.

There were also comments about how the increasing market for "island-hopping" tourism between islands by speedboat, along with the acquisition of faster boats to carry out sport fishing activities is resulting in a rapid increase in the number of such boats, and a parallel increase in collisions leading to mortality and injury to wildlife (albatross, turtles, dolphins, even whales). Until 10 years ago, few ships had the capacity nor the incentive to move faster than about 8 knots (e.g. 15 km/h), which is the average speed of cruise ships. This speed allows ample time for wildlife to avoid collisions.

The mission was informed of the constant challenges in equipping and operating the GNPS fleet of marine reserve patrol vessels. The GNPS has two large and fast ocean-going vessels designed to spend several days at sea (the Sierra Negra and the Guadalupe River). A third fast ship was donated by the Sea Shepherd Society (the Yoshka). The GNPS also has several outboard engine speedboats for day use. Unfortunately, due to poor training of crew and to poor maintenance, these ships are more often damaged and under repair than being used. The Yoshka is reported to have been operational for less than 12 months in total since it was donated to the GNPS in 2005, and the Guadalupe River has been in

dry dock for over a year. If and when fully functional, the GNPS fleet would be among the best equipped in the world according to reports received by the mission.

The low efficiency of the GNPS fleet of marine patrol vessels is a cause for concern. A great deal of money has been invested in these ships, yet they are operating likely at less than 30% efficiency. The GNPS should look to imaginative ways of overcoming this long standing situation. The mission remarks that at the Serengeti National Park, where the Park management authority had similar problems with its fleet of patrol vehicles, an agreement was reached with an international NGO (Frankfurt Zoological Society) which shared the responsibility for the vehicles, resulting in a greater number of vehicles being operational at any given time. This model may be one to look to in seeking a solution to this chronic and serious problem.

Progress on recommendation: efforts are clearly being made to provide opportunities for alternative employment to fishermen, although over-exploitation is still occurring despite strict measures. While resources which have been overexploited (sea cucumber, lobster) are no longer a real issue as the resource has been rendered commercially relatively insignificant, there still needs better regulation to ensure that either the fishing sector follows the rules, or they are trained for activities responding to the tourist sector needs. The GNPS should also monitor the number, speed, and frequency of boats doing inter-island transport, as there may be a case for imposing speed limits.

3.2.3 Tourism (both land- and ship-based)

j. Controlling the number of tourists going to the Galapagos Islands

There are basically two types of tourists visiting the Galapagos: those that fly in and are housed on a cruise ship that then follows a Park-approved itinerary to visit the islands or to go to dive sites (diving tours and island visiting tours are not allowed to be mixed), or else the more recent trend of people arriving to the island and “island hopping” between the inhabited islands, staying in hotels, and hiring local boats to either take them on island visits, bay tours, a fishing outing or on day diving trips. Land-based tourism is increasing much faster than cruise-based tourism, with land-based tourism now accounting for 39% of tourism (where as little as 10 years ago, cruise ship tourism accounted for close to 100%). For example, there were 5,000 tourist arrivals in Villamil in 2002 and 25,000 in 2009 according to a hotel operator there. New hotels are being built, or old guest houses enlarged, on all the inhabited islands visited. In the rush to cash in to this trend, entrepreneurs disregard usual processes and build without the necessary permits. One hotel, the “Iguana Crossing” in Villamil, was built in part on lands belonging to the Park (also a Ramsar site) and is now subjected to a judicial process initiated by the GNPS.

Given the lack of mechanisms to actually control the arrival of tourists to the islands (beyond the current capacity of airplanes to take them there), the mission spoke to the Minister of Environment as well as other senior officials about the idea of establishing a temporary (e.g. 5-10 years) limit on the number of Park entrance vouchers sold. This approach could facilitate the State Party’s efforts at establishing norms and practices for tourism in the islands. Under the current rapid growth environment, the mission observed that the State Party was having difficulties catching up with the reality of the demand. A feasibility study in this regard is recommended.

The mission team also heard concerns over the slow process of the granting of tourism operator concessions. While land-based tourism is increasing dramatically, operators of tourism services (scuba diving, inter-island transport, bay tours and artisanal fishing) have not all yet been formally recognised and regulated. While the process is underway, it is slow. Some of the principles under which concessions are granted, particularly the one relating to the limitation of the number of concessions granted to members of the same family, have been questioned and court cases have been launched, further slowing the process down. There is concern that this approach will be incapable of handling the volume of demand, and it is reported that a number of illegal tourist operations, under-cutting the legal operators, is occurring. The longer that non-licensed operators are in business, the more the pressure will be for the GNPS to recognize them. This situation is delicate and needs to be addressed as soon as possible.

The State Party reported that a “Management System for Sustainable Tourism in Galapagos” was “expected to be complete at the beginning of 2010” by the Ministry of Tourism and provided to the team during the mission. The GNPS has been engaged in a tourist management plan and reported on the “Visitor Site Management System” (SIMAVIS) to ensure adequate management of the protected areas based on the quality of the tourist experience. The Park decided that the cruise ship itineraries should be changed from 7 day itineraries (where popular visitor sites were visited every 7 days by the same ship) to 14 day itineraries, cutting the pressure on the same visitor sites in half.

Finally there is a project to build a new “ecological airport” at Baltra which would have the capacity to welcome reportedly 450,000 visitors per year. The transport authority however assured us that the new airport was to be built in order to adhere to IATA standards in regards to floor space per passenger and other such criteria, leading to the qualification of the new airport as meeting specific industry standards. The issue of capacity is moot, the mission was told, as even the current airport could handle that amount if the flights were scheduled accordingly. The mission was informed that the new airport was to provide better service, not more service.

Progress on recommendation: The Ministries of Tourism and Environment have indicated the preparation of policies that will strictly limit the number of “beds” in the islands, and the Civil Aviation Authority assured us that no new commercial flights will be permitted (although the mission was told that the company LAN will soon start flying to Galapagos). However despite these assurances, there is still a concern over the real willingness to limit visitation. The main concern is not over too much tourism, but of tourism growth being so great as to prevent the authorities from devising and implementing appropriate policies to help manage this tourism. The current situation appeared somewhat disorganized, and there is little evidence that the authorities, at this point, will overcome the challenges soon.

3.2.4 Immigration (correct implementation of the Special Law)

k. Reducing significantly the number of illegal immigrants in the Galapagos Islands, and the resulting impacts of unregulated population growth.

The State Party reported on a programme of “Zero people on irregular status in Galapagos” and as previously reported, have developed a database with a “Transit Control Card” for all incoming visitors to ensure that those that enter the island also leave, which has been in use for two years. Visitors overstaying their allowed time are identified and banned from returning to Galapagos for a one year period. The State Party also reported on a system for how permanent residency status is granted via a

“penta” system (e.g. it takes five representatives from five different institutions to sign off on the regularization of a residency permit), designed for transparency and no special favours. There is also a system of providing permits for “temporary residents”, required to provide labour when not available locally. The proportion of “temporary residents” in the total population is likely rising, although the mission was not provided with recent figures of how many “permanent” and “temporary” residents live on the islands. Indeed figures for the total population were not available, with the last population census by INGALA carried out in 2006. The State Party reports facilitating the return of 263 illegal residents to the mainland in the first nine months of 2009. In addition, in the first half of 2009, 694 people were notified on the irregularity of their status, and 257 were barred from returning to Galapagos for the following year. Further work on identifying illegal residents and facilitating their return is probably still needed. However until tourism is under control (see discussion in section (h) above), the pressure for more illegal and/or temporary immigrants to service this sector will continue. A case may be made for establishing a maximum number of temporary residents at any one time, either as an absolute number, or as a proportion of the number of permanent residents. The report by the State Party on the “Employment Management System” shows that efforts are being made to place more permanent residents in jobs and so reduce the number of temporary (and presumably also illegal) residents on the islands.

Of interest, in addition to asking visitors to pay the current \$100 Park entrance fee, visitors are also required to pay an additional fee of \$10 which covers the cost of the “transit control card” (although this is not clear to most visitors due to poor signage at the Quito airport point of payment, and can be confused with payment to the inspection services).

The mission itinerary did not provide the opportunity to discuss these issues with the pertinent authorities.

3.2.5 Education (the need to develop local capacity)

I. Planning and implementing a capacity-building strategy among local residents to enable them to be better prepared to undertake technical or professional work traditionally done by foreigners.

This seems to be an issue that will take perhaps another generation to resolve. A common complaint heard by the mission is that both professional as well as non-professional labour is not available, hence the need to bring in “temporary” labour from the mainland (for example almost all the hotel staff that the mission met were people from mainland Ecuador or elsewhere). However this is probably also due to the fact that mainland Ecuadoreans are willing to work for a lower salary than the locals. Tourist operators pleaded for the right to bring in more professional guides from the mainland as they say that capacity is still not available from the islands. While the State Party reported on efforts to train Galapagos residents, more work needs to be done to connect market needs and training offer. The State Party reported on measures being undertaken to train local people so that they can and will do the work required on the island, thereby reducing the need for more people to immigrate to the islands. This includes the launching of university level courses in Galapagos, focusing on fields such as business administration, natural resources management and hotel management. Galapagos cruise-ship operators are also supporting capacity building in tourism related subjects through short courses. There is renewed English language and computer training being carried out with the support of local university campuses, municipal governments and the Ecuadorian Capacity Building Institute. Other supporting agencies include the InterAmerican Bank, the local Chamber of Tourism – CAPTURGAL and the National Association of Galapagos Tourism Operators (ASOGAL).

m. Implementing the Educational Reform which has been in the LOREG (Organic Law for the Special Regimen for the Conservation and Sustainable Development of Galapagos) since 1998 yet without realisation.

The strategy for educational reform in Galapagos has changed. The new vision focuses on a national level reform under which the province of Galapagos will adapt specific modules to the local reality, including local history, natural resource and waste management. The State Party noted that the Ministry of Education have been working in partnership with the Charles Darwin Foundation in developing a curriculum. However the mission was told that this work needs to dovetail with the current restructuring of the national curriculum of Ecuador. It would therefore seem that the reform remains in the preparation phase.

3.2.6 Governance (financial and human resources)

The mission notes that although the governance issues are an important component in dealing with the challenges in Galapagos, specific governance issues were not adequately addressed in the 15 corrective measures developed by the WH Committee. They were rather more indirectly addressed under corrective measures (n) and (o), noting the need to optimize resources allocated to Galapagos conservation agencies, and the need to strengthen selection processes for high-ranking positions (again a governance issue). Therefore this report will first give the findings on progress for the last of the 15 corrective measures, followed by remarks on how governance is changing in the Galapagos and what measures are needed to ensure that any new governance system provides clear authority, transparency and accountability, in particular with respect to regional planning which was identified as inadequate.

n. Optimizing of resources allocated to Galapagos conservation agencies (particularly in relation to GNP (Galapagos National Park), INGALA (Insitituto Nacional Galapagos/ National Institute for Galapagos and SESA (Servicio Ecuatoriano de Sanidad Agropecuaria-Ecuadorian Animal and plant Inspection Service)

As noted above under section 2.2 Institutional Framework, Galapagos is going through a period of transition and even the names of the institutions in the corrective measure identified above have changed. Now that Ecuador has adopted a new Constitution in 2008, amendments to the Special Law need to be made and this process has been ongoing for a year and a half, led by the Ministry of the Environment. The provincial government and INGALA have been abolished and replaced by the Governing Council. Therefore the reference to INGALA in both this measure (n) as well as the following measure (o) needs to be changed. In addition, SESA has been restructured and renamed as Agrocalidad (see section 2.2).

Amendments to the Special Law may include amending the section concerning the Park entrance fee. The mission was informed of a proposal to include the notion of the Park fee, possibly with guidance on how it should be allocated, within the Special Law, and that the actual implementation would be included in a separate regulation. This would allow greater flexibility on changing the amount of the Park fee depending on current conditions without having to make another amendment to the Special Law. If the Park fee is increased, this should result in greater budgets to the key institutions involved in Park management and sustainable development of the islands.

The GNPS staff numbers have been stabilized. The Park appears to have the necessary resources to carry out its core functions, though there is some concern that the GNPS's marine patrol vessels are sub-optimal due to lack of appropriately trained personnel. As it depends largely on Park entrance fees to cover its budget, and as there was a 7% drop in visitation in 2009, the Park remains vulnerable to fluctuations in visitation. Agrocalidad, the biosecurity service, remains severely understaffed, but 25 additional technicians are to be hired in the coming months. Should this increase in staff be combined with a further reduction in access points to the islands, the agency should be in a position to start providing optimal inspection services. Agrocalidad receives approximately half of its annual budget from its share of the Park entrance fee, and a further sixth of its budget from user fees, with the rest coming from the national budget. As noted in section (g) above, the Galapagos Invasive Species Control Fund (FEIG) has been capitalized to US\$12.5M with a target of reaching \$15M, interest of which will be spent on invasive species projects.

The State Party report understood "optimization of resources" to mean accountability, noting that Ecuador has a "Transparency and Public Information Access" law requiring public access to information concerning all public services, including hiring of personnel, contracts and budgets, and that since 2008 all public resources are managed through a single State accounting system. It would therefore appear that the resources allocated to Galapagos conservation agencies are well-managed.

o. Strengthening of the selection process for the highest ranking posts (in INGALA and SESA)

As noted above in section (n), INGALA has been consolidated with the provincial government to form the new Governing Council, and SESA is now called Agrocalidad. However the issues are the same: the highest ranking posts in both the Governing Council and Agrocalidad require very high technical as well as managerial capacity, and must be fulfilled by the best qualified candidate and not a political appointee. Currently the Director of Agrocalidad has been filled by a very competent manager from mainland Ecuador who has been with the agency for over 10 years and appointed as a result of his competencies, so this is no longer an issue at this time. As for the key technical director position with the Governing Council, the mission was informed that initially a Galapageño was sought for this position, but as no candidate with the appropriate qualifications was found, the search has been opened at a national level. The mission was told that they expect to fill this key position within the next four months. The State Party report clearly shows the many layers of transparency required in the recruitment of any of these high ranking positions.

The other key position that needs to be filled is the head of the Galapagos Invasive Species Control Fund (see FEIG section (g) above), and here the same level of transparency in the selection process was to be implemented.

The mission learned of the replacement of the GNPS Director on June 8, 2010. The new Director is the former head of the tourism department at the GNPS. The mission had ample opportunity to meet the new Director during the visit and has no reason to believe that he will not implement his responsibilities effectively. However, the new Director appears to have been arbitrarily appointed to the post, raising questions as to the precedent being established for other such high level posts.

Other governance issues

As reported above, the new Governing Council (combining the functions of INGALA and the provincial government) is composed of two government ministries (Environment and Tourism), the governor for

Galapagos (appointed by the president), the mayors of the three municipal governments in Galapagos, and a representative of the smaller settlements in the islands. As this institution is new and required significant organizational restructuring, the Governing Council is still settling into its role, and a technical director of the Governing Council is currently being recruited (see measure (o) above).

In the meantime, there have already been leadership issues of the Governing Council, as although the appointed Governor Jorge Torres Pallo was designated to preside over the Governing Council, in April a judge removed him from this position following the governor's refusal to implement a judgment allowing a resident to receive a tourist concession. This permit had been refused by the Park on technical grounds but the person concerned went to court and the judge overturned the Park decision. This decision is currently under appeal. This is an example of the diversity of challenges facing the Governing Council as it attempts to establish itself as the legitimate governing body for the province of Galapagos.

There is a concern that the position of technical director to the Governing Council risks becoming a political issue, as the incumbent will have the technical responsibility over the effective implementation of many different policies affecting the daily lives of Galapagos residents. It is critically important that the position be filled by a technically capable person, selected in a fully transparent manner against previously established criteria. The chaos surrounding the Park Director position between 2003-2005 contributed significantly to the loss of credibility regarding the capacity of Galapagos-based institutions to carry out their mandates with as little political interference as possible. This should not be allowed to happen at the level of the directorship of the Governing Council. The mission was assured by the national authorities that a fully transparent and technical process was being applied in the selection process.

While the Governing Council will have ultimate authority over issues affecting the inhabited part of the island, this has clear effects on the GNP, and the link with the Director of the Galapagos National Park, who reports directly to the Minister of Environment, would benefit from being clearer. Currently the GNPS is the institution directing Park policy and regulations, which also impinge on the non-Park parts of the islands. There is often direct conflict with the Mayors of the three Municipalities, and it would seem that often the Park has little input in the planning and implementation of development projects. One would expect that the Minister of the Environment will require that the GNPS Director be present during the Governing Council meetings.

An example of a governance issue is that on Santa Cruz the Municipality has taken over Park land and exchanged it with other land in order to create a new urban area for an expanding population (the 70 hectare "El Mirador" project). While urbanising Park land is a bad precedent in itself, the fact that the Park had little say in the matter, and did not even choose what land that they were to receive in exchange is a problem. Another Park land "swap" for urban expansion was also undertaken on Isabela, although reportedly in a more consensual and pro-active manner by the Park. Although the El Mirador project is to proceed according to established environmental criteria, it is interesting to note that the development model selected replicates the single dwelling unit and vehicle-dependent urban sprawl typical of mainland cities. The absence of any policies favouring higher densities was conspicuous for a development taking place in former National Park lands. The mission considers that the National Park authorities and the relevant government authorities have missed an opportunity to establish urban development patterns that would reduce future needs to expand onto Park lands. There is a need to restrict continuous urban expansion and policies for densification should be developed by the municipalities, rather than urban growth moving into Park land. Finally, the World Heritage Committee

should have been informed of this proposal well before it had been approved, as per paragraph 172 of the Operational Guidelines for the World Heritage Convention.

Given the composition of its decision making body, there is a big risk that the Governing Council may be unduly influenced by development pressure from the Mayors which will in turn have negative consequences for the Park. Though the current national government is favourable to strict conservation measures in Galapagos, this may not always be the case.

Finally it should be assured that past multi-stakeholder consultation mechanisms, such as the “Junta de Manejo Participativo” for the marine reserve, may be articulated with the new Consejo de Gobierno. This participative mechanism has worked in the past and the State Party should take them into consideration in future consultation mechanisms.

3.3 Positive or negative developments in the conservation of the property since the last report to the World Heritage Committee

The State Party report notes positive advances on all of the 15 issues outlined in the last report to the WH Committee, although it is important to note that many of these are in the “planning” stage rather than implementation, and only when the plans are fully implemented can it be recorded that they have actually been done. Positive developments include:

- continued notable success on the eradication and management of invasive species by the GNPS, assisted by the CDF and other NGOs;
- continued improvements in the inspection system to prevent new invasive species from entering the islands, particularly in regards to air traffic, although further work is still required for ship based cargo;
- The new Satellite Vessel Monitoring System, an impressive tool to monitor ship movement inside the GMR.;
- Improvements of agricultural efficiency with trial drip-irrigation projects on the island in order to reduce imports from the mainland.

Some negative developments include:

- Significant lack of order in land-based tourism and apparent difficulty for the authorities to deal with the rapid growth;
- Efforts to manage tourism and establish the Governing Council delayed by judicial processes;
- The “El Mirador” housing development on Park land on Santa Cruz (in exchange for non-Park land so the Park has not lost territory, but the issue is rather urban planning);
- Illegal building of half of the “Iguana Crossing” hotel on Park land (also a Ramsar site) on Isabela. However positive is that although the hotel has been built, the Park is pursuing the owners in court;
- Continued sub-division of better agricultural lands for residential subdivisions on the inhabited islands;
- Exploitation of the “artisanal fishing” rules by outside interests to hold an international sport fishing tournament originally denied by the Park;
- the recent introduction of the Giant African Land Snail to Santa Cruz.

Although not a recent development, the parcelling out of lots on private land covered by protected coastal mangrove forest at Villamil on Isabela a few years ago merits ongoing observation. Currently one house has been built on these lots although the mission was informed that this may be removed.

3.4 Information on any threat or damage to or loss of outstanding universal value, integrity and/or authenticity for which the property was inscribed

- No species has knowingly been lost from the Galapagos since its inscription, although a number are listed by IUCN as Critically Endangered. Although conservation measures are being carried out, some threatening factors including climate change and the introduction of bird parasites such as *Philornis downsi* may mean that some of the conservation measures may be too late.
- Problems in governance, manifested by unregulated tourism and chaotic urban planning is a major threat to the integrity of the property. Some recent examples include the exchange of Park land for urban expansion and construction of a hotel partially on Park land.
- Although a level of detail at which other threats to Galapagos OUV could be recorded, the team wishes to highlight the high number of song bird carcasses (including Darwin finches) observed along the main road on Santa Cruz from Puerto Ayora to the airport. This issue has been studied by Jiménez-Uzcátegui and Betancour (2008), and requires stricter regulations to solve the problem.

Part 4. ESTABLISHING A DESIRED STATE OF CONSERVATION FOR REMOVAL OF THE PROPERTY FROM THE LIST OF WORLD HERITAGE IN DANGER

On the basis of the draft Statement of Outstanding Universal Value submitted by the State Party, on observations made by the World Heritage Centre and IUCN, the mission developed a draft proposal for the desired state of conservation for removal of the property from the List of World Heritage in Danger (DSOCR), including 10 proposed indicators designed to evaluate progress on the state of the property's ecological values, integrity and management, which are the basis of its Outstanding Universal Value. The draft DSOCR will be discussed with the State Party prior to finalization. The final set of indicators will need to be met in order to remove the property from the List of World Heritage in Danger.

The 10 draft indicators proposed to measure the recovery of the property's values and integrity are presented in Table 1, alongside the rationale for their selection and a proposed method of verification, and listed below:

Ecological Indicators

1. **Endemic species:** IUCN Red List status for all endemic bird, reptile and mammal species remains either stable or improves.

Method of Verification: Evaluations of every endemic bird, reptile and mammal species on an annual basis using IUCN Red List criteria in order to monitor change in conservation status.

2. **Invasive species:** No new species known to be invasive established on any of the islands. If any new introductions are discovered, a rapid response programme for their immediate eradication must be implemented. (note: the option to identify a few invasive species that require priority attention to be eradicated in the next 5 years will be discussed with the State Party)

Method of Verification: Using IUCN's Invasive Species Specialist Group database on invasive species as a guide to known invasives, an annual report on the status of invasive species on each island will

demonstrate progress on this indicator. Successful eradication programmes should also be taken into account.

Integrity & Management Indicators

3. **Exit points:** A single cargo loading port in Guayaquil, with the necessary biocontrol infrastructure and effective processes in place, is established.

Method of Verification: Establishment of a single cargo loading port in Guayaquil and annual reports on its operations

4. **Entry points:** A single cargo entry point on Galapagos, with a feasibility study completed on the possibility of locating this at Baltra. A single inter-continental entry point by air at Baltra (a special case may need to be made for San Cristobal, see rationale). The Villamil air not to be put into service as a commercial airport, and to be completely dismantled, or, at the very least, convert the terminal to another permanent use.

Method of Verification: Feasibility study of Baltra as the singly entry port for cargo from the continent produced, and a decision taken to identify the single entry point for cargo to the islands. Also a single or possibly two entry points by air, ensuring that the Villamil air terminal is not put in service.

5. **Biosecurity:** Independent certified audits of the biosecurity inspection and control measures at continental exit points (Quito airport and Guayaquil airport and maritime terminal), and at Galapagos entry points (ideally a single port and a single airport). All entry and exit points must receive a passing grade from the independent audit.

Method of Verification: Reports from auditors.

6. **Marine patrolling:** A total of at least 30 patrol days per month for a consecutive 12 month period are carried out by the three main patrol ships of the GNPS, with a focus on no-go areas established under the Marine Reserve management plan and areas with high fisheries activities.

Method of Verification: GNPS reports, ships' logs

7. **Judicial process:** The crew of any captured illegal fishing vessels are effectively prosecuted and legally mandated penalties are applied.

Method of Verification: Reports on the results of judicial processes.

8. **Immigration control:** The number of permanent residents on the island to be reported and maintained at current levels or ideally reduced, and the number of new temporary resident permits not to exceed 10% of the permanent resident population.

Method of Verification: Reports from the Governing Council's Department of residency.

9. **Tourism management:** A comprehensive tourism strategy for Galapagos is legally adopted and effectively implemented. The strategy should outline in detail how the number of arrivals will be controlled, the nature of tourism to be encouraged, and clearly indicating the upper limit of arrivals on an annual basis.

Method of Verification: Legal adoption of the Tourism Strategy for Galapagos. Government tourist statistics indicating number of nights spent on cruise ships as well as on land.

10. **Financing for introduced species work:** The Introduced species trust fund (FEIG) has reached its \$15M capitalization target, and there has been demonstrable effective implementation of an appropriate portfolio of invasive species projects implemented.

Method of Verification: Report from the FEIG.

Timeframe for implementation

A period of at least five years may be needed to attain the desired state of conservation for removal of the property from the List of World Heritage in Danger.

Table 1: Proposed indicators, rationale and method of verification for the Desired State of Conservation for Removal of Galapagos National Park from the List in of World Heritage in Danger

	INDICATOR FOR REMOVAL OF THE PROPERTY FROM THE LIST IN DANGER		RATIONALE FOR INDICATOR	METHODS OF VERIFICATION
ECOLOGICAL INDICATORS	1	Endemic species: IUCN Red List status for all endemic bird, reptile and mammal species remains either stable or improves.	Species endemic to the Galapagos form a substantial part of the property's OUV, and the endemic bird, reptile and mammal species have all had conservation assessments and can be monitored. Species conservation status is an important indicator to ensure that improved management is working. If species status declines due to reasons beyond the control of the management authority (i.e. due to a catastrophic event such as a volcano or to climate change), this should be taken into account. Species decline or extinct due to introduced species as well as from other causes; however is the responsibility of the management authority to address such treats. Only vertebrates have been included as indicator species to facilitate monitoring, although selected plants and invertebrates could be included.	Evaluations of every endemic bird, reptile and mammal species on an annual basis using IUCN Red List criteria in order to monitor change in conservation status.
	2	Invasive species: No new species known to be invasive established on any of the islands. If any new introductions are discovered, a rapid response programme for their eradication must be implemented	One of the greatest threats to the islands is the introduction of known invasive species, whether they be new to the islands such as the Giant African Land Snail, or else already present on some islands but not present on others, such as rats, cats and goats. If the systems in place are working, there should be no new introductions of invasive species either to Galapagos or to islands which have not yet been invaded. If an accidental introduction does occur, the management authority then needs to implement a rapid response programme for its eradication.	Using IUCN's Invasive Species Specialist Group database on invasive species as a guide to known invasives, an annual report on the status of invasive species on each island will demonstrate progress on this indicator. Successful eradication programmes should also be taken into account.
INTEGRITY & MANAGEMENT INDICATORS	3	Exit points: A single cargo loading port in Guayaquil, with the necessary biocontrol infrastructure and effective processes in place, is established.	Controlling the most dangerous vector for species introductions to the islands, i.e. on cargo ships, is a major need. Plans are underway to have a single cargo loading point in Guayaquil. A longer term need is the rejuvenation of the cargo fleet to facilitate control at this unique loading point.	Establishment of a single cargo loading port in Guayaquil and annual reports on its operations.
	4	Entry points: A single cargo entry point on Galapagos, with a feasibility study completed on the possibility of locating this at Baltra. A single inter-continental entry point by air at Baltra (a special case may need to be made for San Cristobal, see rationale). The Villamil air terminal is dismantled, or at the very least, permanently converted to another use. No commercial air service from/to the continent is established.	A single cargo entry point, ideally at Baltra if the feasibility study is positive, is needed. For air traffic, ideally the Baltra airport should be the only inter-continental arrival point, recognising that San Cristobal airport is already in operation and it may be impossible to stop direct traffic at this point in time. However, the Villamil air terminal must not be put into service as a commercial airport. Plans to convert the terminal to another use or else dismantle it should be developed, or ideally, the terminal is completely dismantled.	Feasibility study of Baltra as the singly entry port for cargo from the continent produced, and a decision taken to identify the single entry point for cargo to the islands. Also a single or possibly two entry points by air, ensuring that the Villamil air terminal is not put in service.
	5	Biosecurity: Independent certified audits of the biosecurity inspection and control measures at continental exit points (Quito airport and Guayaquil airport and maritime terminal), and at Galapagos entry points (ideally a single port and a single airport). All entry and exit points must receive a passing grade from the independent audit.	Introduced species are the most important threat to the conservation of Galapagos biodiversity. The reason to restrict exit and entry points is to concentrate biosecurity measures at these key sites where introduced species can be detected before dispersing in the islands. In particular x-ray equipment at all ports and dogs specifically trained to detect organic matter carried either by passengers or in cargo are required.	Reports from auditors.

	6	Marine patrolling: A total of at least 30 patrol days per month for a consecutive 12 month period are carried out by the three main patrol ships of the GNPS, with a focus on no-go areas established under the Marine Reserve management plan and areas with high fisheries activities.	Illegal fishing remains a constant threat and the GNPS must maintain the capacity to effectively monitor the entire reserve and apprehend ships carrying out illegal activities.	GNPS reports, ships' logs.
	7	Judicial process: The crew of any captured illegal fishing vessels are effectively prosecuted and legally mandated penalties are applied.	Reports that the judicial system is not treating environmental crimes seriously, resulting in a waste of patrolling effort and no dissuasion of illegal activities.	Reports on the results of judicial processes.
	8	Immigration control: The number of permanent residents on the island to be reported and maintained at current levels or ideally reduced, and the number of temporary resident permits not to exceed 10% of the permanent resident population.	Current population levels must not increase, and ideally should decrease. The State Party has established a residency control system in order to monitor the population, and to award temporary residency permits under specific circumstances. There is a concern that this temporary resident status may be used excessively, rendering immigration control to the islands ineffective. Setting a cap on temporary residents will further encourage capacity building of permanent residents.	Reports from the Governing Council's Department of residency.
	9	Tourism management: A comprehensive tourism strategy for Galapagos is adopted is legally adopted and effectively implemented. The strategy should outline in detail how the number of arrivals will be controlled, the nature of tourism to be encouraged, and clearly indicating the upper limit of arrivals on an annual basis.	Tourism is the main driver of change in Galapagos. Until it is effectively managed and policies are in place to guide how it should evolve in the islands, it will continue to be the root cause of the main threats.	Published vision. Government tourist statistics indicating number of nights spent on cruise ships as well as on land.
	10	Financing for introduced species work: The Introduced species trust fund (FEIG) has reached its \$15M capitalization target, and a reasonable portfolio of invasive species projects implemented.	Carrying out control and eradication work requires stable, long term funding. The FEIG was set up to provide such support and evidence showing that it has reached its goal and can demonstrate project implementation is needed	Report from the FEIG.

Part 5. CONCLUSIONS AND RECOMMENDATIONS

Overall, although good and measurable progress has been achieved on certain aspects of the invasive species issues, illegal fisheries control, immigration and education (which is recognised as long-term), the World Heritage Centre and IUCN conclude that continued effort on all these issues is still required, and that significant progress remains to be achieved for the three issues listed below. It is important to note that while many of the corrective measures have now been successfully applied, a number of critical activities identified by the State Party are still in the “planning stage”. The mission considers that continued progress on the corrective measures in general, and demonstrated achievements in regards to these three main issues below must be reported before the property is removed from the List of World Heritage in Danger.

Invasive alien species: A critical gap remains in efforts to prevent the arrival of new species to the islands. The most likely introduction channel for new species is via the shipping of organic produce from the continent to the islands. Biosecurity control systems remain far from adequate, particularly at the Guayaquil cargo loading docks. The ships transporting the goods are also not optimal in terms of applying effective biosecurity measures. These ships still frequent several ports in Galapagos, unnecessarily increasing the risk of introduction and dispersal of species among them all. The biosecurity inspection agency itself has been strengthened and is well managed, though still understaffed in relation to the number of exit/entry points it must control.

Recommendations:

- i. Establish a single cargo loading port in Guayaquil, with the necessary biosecurity infrastructure and processes in place.
- ii. Commit to replacing, within a clearly established timeframe, the current aging and mal-adapted cargo ships with new ships designed to facilitate the application of biosecurity measures.
- iii. Systematically apply internationally certified bio-security practices, with regular independent compliance audits, at cargo loading and off-loading points, and on cargo ships.
- iv. Institute a capacity-building programme for the biosecurity inspection agency (Agrocalidad) with the support of the highest quality international biosecurity inspection officials, including a focus on dogs trained in detecting organic matter.
- v. Strengthen the budget for Agrocalidad in Galapagos. Consider increasing the inspection fees (currently less than real cost) so that the system may be generously financed.
- vi. Carry out a feasibility study of selecting Baltra as the only Galapagos port authorized to receive cargo directly from the continent, so that international quality biosecurity inspections facilities may be concentrated there and be more effective. Ensure that the Villamil air terminal is not put in service as a commercial airport and consider the possibility of dismantling it completely, or at the very least, permanently converting it to another use.

Tourism: Current high visitation levels are overwhelming the efforts to devise and implement a rational tourism management strategy and system. These efforts also suffer from the absence of a broadly accepted vision for tourism in Galapagos. Authorities responsible for tourism and conservation need the opportunity to devise and implement a sustainable system for tourism in a more stable environment, founded on a clearly articulated vision. This is particularly critical for land-based tourism, where no single authority is in charge. Currently, unregulated land-based tourism and intense pressure to open up

sport fishing in a regulatory vacuum have the potential for creating serious threats to the Outstanding Universal Value of the property.

Recommendations:

- vii. Develop and implement a clear tourism vision and strategy for Galapagos, with a focus on establishing mechanisms to discourage rapid and uncontrolled growth in visitation and to guide future decision-making processes.
- viii. Carry out a feasibility assessment for imposing an upper limit to the number of Park entrance permits awarded annually, which would help improve the conditions under which the State Party could develop and implement effective tourism management mechanisms.
- ix. Impose a moratorium on the current unregulated practice of “sport fishing” until such a time as i) the official vision and policy for tourism in this property is finalized and, should this allow for sport fishing ii), sufficient scientific evidence is obtained demonstrate how sport fishing could proceed to ensure the property’s Outstanding Universal Value is not compromised (e.g. intensity, seasonality, zonation, licensing).

Governance: significant structural changes to the governance structure of the province are under way. The new (2008) constitution for Ecuador has maintained Galapagos as a distinct province, but has done away with its provincial government and the elected post of provincial prefect. This change is widely seen as positive in the islands, removing one electoral and therefore political layer, according to many comments received by the mission. To replace the provincial government, the constitution calls for a Governing Council (GC) presided by the provincial governor (appointed by the president) and consisting of the three elected mayors of the main settlements in Galapagos and a representative of the small settlements, along with “those authorities responsible for determining the law”. The latter authorities are currently considered to be the ministers leading the ministries of the Environment and Tourism – but the final composition is yet to be formally established. The Technical Director of the GC remains to be hired.

The mission concludes that a clear, transparent and authoritative decision-making body for the Galapagos is in the process of being developed. If sustainable conservation results are to be achieved, it will be critical that the conservation impacts of decisions taken by this body be of prime concern.

Recommendations:

- xi. Ensure clear lines of communication between the Governing Council and the Director of the GNPS in regards to the management of the National Park and Marine Reserve as well as on all policies affecting the Park.
- xii. Effective participatory mechanisms which have been painstakingly developed in the past (e.g. the Junta de manejo participativo) should not be discarded in the establishment of new governance structures. These provide a tried and tested means through which consensus on critical issues can be reached.
- xiii. The recruitment process for the Technical Director of the Governing Council needs to be as fully transparent and competence-based as that of other key positions including the Director of the GNPS and Agrocalidad.
- xiv. Strengthen the judicial processes regarding environmental infractions in such a way as to effectively discourage illegal fishing.

References

Carrión, V. (2009). *Monitoring and control of tilapia (Oreochromis niloticus) in the "El Junco" Lagoon, San Cristóbal*. http://www.galapagospark.org/nophprg.php?page=parque_nacional_introducidas_tilapia

CDF, GNP and INGALA. 2008. *Galapagos Report 2007-2008*. Puerto Ayora, Galapagos, Ecuador.

De Roy, T. (ed.) 2009. *Galápagos: cincuenta años de ciencia y conservación*. Parque Nacional Galápagos, Ecuador. 239 pp.

Jiménaz-Uzcátegui and Betancour, F. 2008. Bird mortality by vehicles. In: *Galapagos Report 2007-2008*. Puerto Ayora, Galapagos, Ecuador. Pp. 103-106.

Watkins, G. and Martinez, A. 2008. The changing organizational framework in Galapagos. In: *Galapagos Report 2007-2008*. Puerto Ayora, Galapagos, Ecuador. pp. 58-69.

Weiner, J. 1994. *The Beak of the Finch: A Story of Evolution in Our Time*. Random House, New York, USA

Annex 1. 2009 World Heritage Committee Decision

33COM 7A.13 - Galápagos Islands (Ecuador) (N 1 bis)

Decision Text

The World Heritage Committee,

1. Having examined Document *WHC-09/33.COM/7A*,
2. Recalling Decision **32 COM 7A.13**, adopted at its 32nd session (Quebec City, 2008),
3. Acknowledges and commends the progress made by the State Party on the implementation of some of the corrective measures adopted by the World Heritage Committee at its 31st session (Christchurch, 2007) and included in the Action Plan produced in response to the Presidential Decree No. 270;
4. Notes with concern the continued threats to the Outstanding Universal Value and integrity of the property, arising from very rapid growth of land based tourism and from invasive alien species;
5. Invites the State Party to continue to strengthen its efforts on the implementation of all of the corrective measures established for the property;
6. Reiterates its request to the State Party, in consultation with the World Heritage Centre and Advisory Bodies, to develop a draft Statement of Outstanding Universal Value and a proposal for the desired state of conservation for the removal of the property from the List of World Heritage in Danger, for examination by the World Heritage Committee at its 34th session in 2010. The State Party is encouraged, if it wishes to do so, to prepare and submit an International Assistant request to support this process;
7. Also requests the State Party to submit to the World Heritage Centre, by **1 February 2010**, a comprehensive report on the state of conservation of the property, with particular emphasis on the identified corrective measures in its 15 point Action Plan and on its response to land based visitation trends, for examination by the World Heritage Committee at its 34th session in 2010. The report should also address how corrective measures are contributing to addressing the requirements associated to the anticipated Statement of Outstanding Universal Value and the anticipated desired state of conservation for the removal of the property from the List of World Heritage in Danger;
8. Requests the State Party to invite a joint World Heritage Centre/ IUCN reactive monitoring mission to assess progress made on the implementation of the decisions of the Committee;
9. **Decides to retain the Galápagos Islands (Ecuador) on the List of World Heritage in Danger.**

Annex 2. Galapagos Monitoring Mission Terms of Reference

Mandate: WH Committee Decision 33 COM 7A.13

8. Requests the State Party to invite a joint World Heritage Centre/ IUCN reactive monitoring mission to assess progress made on the implementation of the decisions of the Committee

Background: This property was inscribed onto the List of World Heritage in Danger (LWHD) in 2007 as a result of a combination of factors. Those most significant issues noted by the World Heritage Committee in its 2007 decision (Annex 1) to inscribe this property on the LWHD related to the rapid growth of land based tourism and to invasive species. Some of these factors were also noted by the Committee in its 2009 decision. It should be recalled that one of the main threats to Galapagos' OUV stems from the introduction and dispersal of alien (non-native) species which can displace native species. The introduction of non-native species is facilitated by the movement of goods and people between the continent and the islands, and between islands. There is a direct link between rapid economic development on Galapagos and the movement of people and goods from the continent and between the islands. This is also linked to the rapid expansion of the resident population which creates additional pressures on the use of resources in the islands, thus generating an important threat. Efforts to improve fisheries management and to control illegal shark fishing have been reinforced recently and progress in this area is reported.

Mission Team: The mission team will consist of 1 representative from the World Heritage Centre and 1 from IUCN.

Suggested Dates: Arrive in Quito: Wednesday, 10th February
Depart Quito: Friday, 19th February

Mission Goal:

To assess the state of conservation of the property, in particular to evaluate progress achieved on the implementation of the identified corrective measures in its 15 point Action Plan, its response to land based visitation trends, and in regards to the concerns expressed by the World Heritage Committee, in its 2009 Decision with the view to assess the case for the potential removal of the property from the List of World Heritage in Danger.

Mission Objectives:

- To assess the effectiveness of the institutional efforts to prevent the arrival and dispersal of alien species in Galapagos. This will include consideration of continental based infrastructure and systems as well as those in Galapagos. Activities will include:
 - o Meetings with pertinent authorities in Quito and Guayaquil (Agrocalidad)
 - o Inspection of infrastructure and operations in Quito and Guayaquil (airports, maritime ports)
 - o Inspection of infrastructure and operations in Galapagos (airport, maritime)
 - o Meetings with pertinent authorities in Galapagos (ex. Agrocalidad, GNPS, CDF, farmers' representatives)
- To evaluate if and how economic growth drivers in Galapagos are leading to increased risk in the introduction and dispersal of alien species and to assess if and how these drivers and risks are being addressed through planning and development policy. Given the predominance of tourism as the economic engine of the islands, a particular focus will be made on tourism in this regard. Activities will include:
 - o Meetings with the national tourism authorities in Quito
 - o Meetings with the Galapagos tour industry representatives (cruise and non-cruise)
 - o Meetings with pertinent policy makers (Municipal governments, INGALA)
 - o Review of pertinent development planning documents (land and water use, urban development, waste management) and regulations as well as progress achieved on their implementation.
 - o Review of regulations for controlling illegal immigration and progress achieved on its implementation.

- To evaluate the state of implementation of the GNP management plan with particular emphasis on the existing capacity for its enforcement. Activities will include:
 - o Meetings with the Ministry of the Environment in Quito to assess institutional support and resources allocated to the implementation of GNP management plan
 - o Meeting with the GNPS and NGOs supporting conservation activities on progress and key obstacles on the implementation of GNP management plan as well as how the management plan will be supportive of the requirements associated to the Statement of Outstanding Universal Value and the desired state of conservation of the property.
- To obtain the latest information on fisheries stocks of key marine species and fisheries management in Galapagos in an effort to assess: (a) the state of implementation and enforcement of the management plan for the marine reserve and (b) the sustainability of the fishing effort and whether the marine-related OUV of the property is not at risk. Activities will include:
 - o Meetings with the Galapagos National Park Service, NGO's focusing on marine conservation issues
 - o Meeting with representatives of key fishing cooperatives
 - o Meetings with the Ministry responsible for fisheries (Quito)

Statement of Outstanding Universal Value and Desired State of Conservation

As per World Heritage Committee Decision 33 COM 7A.13, paragraph 7, the State Party may take advantage of the mission team's presence to organize a short working session on the finalization of these documents, if not already completed by then.

General:

1. Suggested mission strategy: i) An initial meeting in Quito with the pertinent national authorities is a good way to start the mission. Mission objectives can be reviewed, and the agenda shared. Opportunities to maximize the use of the mission team can be explored and any ambiguities clarified. This could be followed by ii) meetings and visits in Quito to pertinent authorities, NGOs, and facilities, and similar meetings in Guayaquil before moving to iii) Galapagos to carry out mission work there (Santa Cruz, perhaps, if deemed necessary, San Cristobal (a visit to Villamil is not considered necessary for this mission). Finally, a debriefing session in Quito with pertinent authorities will be implemented, so that the observations and preliminary conclusions of the mission can be shared with them.
2. Public meeting: The visit of a World Heritage monitoring mission to a property is a good opportunity to clarify potential misunderstandings amongst various stakeholder groups. To this end, a general public meeting (evening) at which the mission team can explain its role and the State Party can present the general context of the mission can be very useful. This could be held in Puerto Ayora, and if possible, in San Cristobal as well.
3. Site level arrangements: The State Party is responsible for arranging non-commercial transportation, arranging hotel bookings and setting meetings and visits. UNESCO and IUCN are responsible for commercial transportation.

Deliverable:

The mission team (IUCN to take the lead) will provide a draft report in the standard format for reactive monitoring missions no later than 4 weeks after the completion of the mission. Once the draft report is approved by IUCN and the WHC it will be shared with the State Party for their information.

Annex 3. Agenda Galapagos Reactive Monitoring Mission

27 April - 6 May, 2010

Quito and Galápagos (Santa Cruz, San Cristóbal, Santa Fe, Isabela)

Day	Programme	Activities and people met
Tuesday, 27 April, 2010	Arrival of mission to Quito	Dinner with Tania Villegas, Ministry of Environment and brief salutations with Marcela Aguiñaga, Minister of the Environment
Wednesday, 28 April, 2010	Quito. Meet with IUCN (WS). Meeting with the Ministra de coordinacion de patrimonia.	Meet with Victor Inchausti, Arturo Moro, Andrea Michelson, Bernardo Ortiz at IUCN SUR. Ministerial meeting with Maria Fernanda Espinosa and Patricia Hermann, Asesora Ministerial Ministerio Coordinador de Patrimonio Natural y Cultural. Dinner with Godfrey Merlen and meet Noémie d'Ozouville in Quito.
Thursday, 29 April, 2010	Travel to Galapagos, direct flight Quito to Baltra, and then flight to San Cristóbal. Meetings with the Mayor of San Cristóbal, Chamber of tourism (CATUCRIST), Fishing cooperatives and the Governor.	Travel with Washington (Wacho) Tapia, met at Baltra by Tania Villegas and Edgar Muñoz, GNPS Director. Lunch at San Cristóbal with them and Edwin Naula (GNPS tourism head), Mario Villalta (GNPS marine park head) and others. Meeting with Mayor of San Cristóbal Pedro Zapata R. and colleagues to discuss urban and rural planning. Meeting with CATUCRIST (San Cristóbal Chamber of tourism) headed by Magdalena Cruz Rivas and colleagues. Meeting with representatives of fishing cooperatives. Visit to the Governor Jorge Torres P. and discussion about the Governing Council.
Friday, 30 April, 2010	Travel from San Cristóbal to Santa Cruz in Park boat, with a stop at tourist site on the island of Santa Fe en route. Afternoon visit the Mayor of Santa Cruz, Agrocalidad and MAGAP (Ministerio de Agricultura, Ganadería, Acuacultura y Pesca).	Slight delay as Park boat momentarily breaks down at sea. Series of 6 presentations by collaborators of the Mayor's office including planning (discussion of the "El Mirador" housing estate), water, solid waste issues, introduced species, sustainable development (Director Ivonne Torres Telio). Meet Agrocalidad Director David Arana Vallejo and colleague, and MAGAP Director Luis Bravo Solís. Dinner with Gabriel López, Director CDF.
Saturday, 1 May, 2010	Travel from Santa Cruz to Isabela in Park boat. Meeting with the Mayor of Isabela. Visit to Ramsar site, and then meeting with INFA (Instituto nacional del niños y la familia).	Meeting with Mayor of Isabela Bolívar Tupiza Gil and his collaborators, Leonardo Garcia GNPS head of Isabela regional office and National Assemblyman Angel Vilema. Wacho Tapia and Leonardo Garcia lead visit to Ramsar site and tortoise captive breeding facility. After meet with two women responsible for managing the INFA programme on Isabela and a representative for youth.
Sunday, 2 May, 2010	Travel from Isabela to Santa Cruz in Park boat, no time to stop at Seymour Norte but cross island from Baltra	Accompanied by Wacho Tapia and Tania Villegas. Meet NGOs WildAid (Oswaldo Rosero), Fundar (Carlos Armada),

	side of island back to Puerto Ayora. Meeting with NGOs followed by a visit to a drip-irrigation project and a coffee plantation managed by MAGAP.	ECOLA, Sea Shepherd (Alex Cornelissen, Hugo Echeverria and colleague), CI (Fernando Ortiz). WWF not at table for some reason.
Monday 3 May, 2010	Puerto Ayora. Morning meeting with staff at GNPS, followed by meeting with CAPTURGAL (Santa Cruz Chamber of tourism). Visit Satellite Monitoring station for Marine Reserve and kennels where goat hunting dogs kept. After visit CDF.	First meeting with GNPS Director Edgar Muñoz and legal advisor Óscar Cortez. Presentations by a number of GNPS staff including Victor Carrión (introduced species), Mario Villalta (marine), Edwin Naula (tourism), Sixto Naranjo (conservation). Meeting with President and representatives of CAPTURGAL including Aldo Salvador Hidalgo, lunch with rep. from tourism industry (Klein Tours). Mario Villalta and colleague show us the satellite monitoring of the marine reserve system, visit hunting dog kennels. Meeting with Gabriel López, Felipe Cruz, Mark Gardener and other CDF staff.
Tuesday 4 May, 2010	Return by air to Quito. Meeting with UNESCO.	On flight brief meeting with the second National Assemblyman for Galapagos Alfredo Ortiz Cabos, and Galapagos tourist operator and guide Juan-Manuel Salcedo. Debriefing with Head of UNESCO regional office Edouard Matoko and Jorge Ellis, Mauricio Castillo, Rosa González, Enrico Dongiovanni.
Wednesday 5 May, 2010	Quito. Meeting with FEIG (Galapagos Invasive Species Control Fund). Working meeting with representatives of different Ministries.	First meeting with Samuel Sanguenza Paro Director FAN (Fondo Ambiental Nacional). Next working meeting included Patricia Hermann (Patrimonio), Camila Martinez I and M. Montalvo (Ministry of Planning), Victor Hugo Jarpin (Civil aviation), Maime Vaderas Samanifeo (MAGAP), Luis Xavier Falconi (Tourism), Monserrathe Bejarano (Agrocalidad).+ MoE and UNESCO people. Dinner with Stephan Küffner journalist from the Economist.
Thursday 6 May, 2010	Quito. Meeting with Minister of Environment and Minister of Heritage Coordination and Minister of Environment. Final presentation of results and press conference. Close of mission.	María Fernanda Espinosa (Ministra de coordinacion de patrimonia) and Marcela Aguiñaga (Ministra de Medio Ambiente), representatives of all Ministries concerned (see yesterday) and the press.