



SPECIES SURVIVAL COMMISSION

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The World Conservation Union



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Species



Inside:

**Spotlight on SSC's Unsung Heroes
SSC Working at the Human-Wildlife Interface**

Species 44

Contents

3 Editorial

One Programme – One Voice

Specialist Group Chair Profiles

Spotlight on SSC's Unsung Heroes

- 5 African Rhino
- 6 Afrotheria
- 6 Amphibian
- 7 Arctic Plant
- 7 Asian Rhino
- 8 Bear
- 8 Bison
- 9 Cactus and Succulent Plant
- 10 Canid
- 10 Caprinae
- 11 Cetacean
- 11 Conservation Breeding
- 12 Coral Reef Fishes
- 12 Crane
- 13 Crocodile
- 13 Deer
- 14 Equid
- 14 Flamingo
- 15 Freshwater Fish
- 16 Fungi
- 16 Galapagos Plant
- 17 Groupers and Wrasses
- 17 Grouse
- 18 Iguana
- 18 Invasive Species
- 19 Korean Plant
- 19 Lagomorph
- 20 Madagascar Plant
- 20 Macronesian Island Plant
- 21 Marine Turtle
- 22 Mediterranean Island Plants
- 22 Odonata

- 23 Palm
- 23 Philippine Plant
- 24 Polar Bear
- 24 Shark
- 25 South American Camelid
- 25 Storks, Ibises and Spoonbills
- 26 Sturgeon
- 26 Sustainable Use
- 27 Tapir
- 27 Wolf
- 28 Large Carnivore Initiative for Europe

News Round-up

- 29 Experts Develop Global Action Plan to Save Amphibians from Extinction
- 29 Substantial Increases in Major Southern and Eastern Africa Savannah Elephant Populations
- 29 Global Marine Species Assessment Underway
- 29 Pulling Together for a Continental Strategy for the Conservation and Management of the African Lion
- 30 SSC Undertakes First Ever IUCN Red List of European Threatened Mammals
- 30 SSC Perspective on Avian Influenza
- 30 Wildlife Conference Gives Conservation Boost to West Africa's "Forgotten" Elephants
- 30 Escaping the Cats' Clutches Gives the Anegada Iguana a Good Headstart
- 31 Slow but Steady – Giant Tortoises Help Clear Invading Species from Island Paradise
- 31 SSC Specialists Identify Global Priorities for Reducing Cetacean Bycatch
- 31 SSC Mourns Two of its Champions

32 Feature

SSC Working at the Human-Wildlife Interface

35 Publications

End Notes

- 36 Staff News
- 36 Red List Programme News
- 37 Global Mammal Assessment
- 37 Online registration for SSC Members



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Species is the newsletter of the Species Survival Commission of IUCN–The World Conservation Union. Commission members, in addition to providing leadership for conservation efforts for specific plant and animal groups, contribute technical and scientific counsel to biodiversity conservation projects throughout the world. They provide advice to governments, international conventions, and conservation organizations.

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ONE PROGRAMME, One Voice

A joint message from the SSC Chair and the Head of the IUCN Species Programme

A YEAR HAS PASSED since the third IUCN World Conservation Congress (WCC) in Bangkok, and since we both joined IUCN, ready to take on the exciting challenges involved in leading the IUCN Species Survival Commission (SSC) and the Species Programme. Together, we have climbed a steep learning curve, applying our conservation experience, knowledge and skills to the new tasks before us. We have brought with us the “fresh eyes” of newcomers; learning, assimilating and digesting the structure and functioning of the system around us, while at the same time reviewing and questioning. We are working with the strengths of the SSC and Species Programme and addressing their weaknesses, moving ever closer towards achieving the vision, goal and objectives of the IUCN and the mandate given us by the WCC.

During this past year we have aspired to implement one of the most important changes in the history of IUCN—the decision by Council, formally adopted by the WCC, for all Commissions to join their combined forces with other components of the Union, in Gland and in the Regional and Country Offices, to deliver on a single programme, the IUCN Programme 2005–2008. It is in this spirit that we are presenting a joint message to the SSC membership and partners as it is only through combining our efforts that we will achieve our conservation objectives.

Much of the work of the past year can be summarised into a simple phrase - building the network and its support structure. We have spent much time reviewing the SSC network and have appointed Chairs to our Specialist Groups and Task Forces. The selected Chairs have each been carefully chosen based on their notable expertise and leadership qualities. Recalling that those selected are among the most accomplished and committed individuals in the field of conservation biology, we feel honoured that they have not only agreed to take up the challenge of chairing their Group, but are regularly interacting with us in a spirit of cooperation, collaboration and shared objectives—those stemming from the IUCN Programme.

It is through our expert volunteer network that we produce the scientific and practical foundation on which the effective delivery of conservation is built, both within the IUCN and beyond. Further, it is the Specialist Group and Task Force Chairs

that govern and maintain this structure, ensuring our relevance and strengthening our delivery. In recognition of this, we have devoted this edition of *Species* to the Chairs—to hearing more about their backgrounds, their motivations, their conservation work, and the outcomes they anticipate for their Groups.

Specialist Group and Task Force Chairs are guided by a set of deliverables, which are laid out in a revised Terms of Reference (2005–2008). To assist Chairs in successfully leading their Group and in achieving these deliverables, we have provided them with an Operational Guidelines and Advice document. This expands on the topics covered in the Terms of Reference and presents the accumulated wisdom of a number of experts with many years of SSC and Specialist Group experience. We are also currently working on a web-based Chair's forum, where we will post relevant material, and where Chairs can post their own information documents and advice, and engage in specific discussions.

The first SSC Steering Committee meeting, held at IUCN headquarters in June 2005, saw the establishment of a formal Task Force to review the current structure of the SSC and to make suggestions on modes and means for optimising the Commission's structure in future and its ability to deliver on its three strategic objectives. The Task Force will take into account the relevant findings of the 2001 Study on Voluntarism in the SSC and the recommendations of several external Commission reviews in forming its opinions. While some changes have already been made to the structure of the Specialist Group network, the Task Force will continue their consultation over the next year or so and we anticipate further changes to the Commission as an outcome of this process. We are confident that the work of the Task Force will create a stronger, more vibrant and more effective network for achieving our conservation objectives, allowing the SSC to not only live up to its reputation of the previous decades, but to surpass it.

In addition to the Re-structuring Task Force, the Steering Committee also constituted a Communications Task Force, which aims to develop a more strategic approach to SSC and Species Programme communications and to ensure more

effective outreach, both internally and externally. This group held its first meeting in September and successfully charted the way to “making our message more relevant” both inside and outside the organization, while reaffirming SSC’s role in the world of more traditional species conservation efforts.

The second Steering Committee meeting was held in December in Patagonia, Argentina where we were the guests of Steering Committee member, Dr Claudio Campagna. A report of the meeting will be published in *Species 45*.

During the past year, we have covered many interesting topics, such as engaging with our sister commission, the World Commission on Protected Areas, in discussions on joint work in the areas of analyzing gaps in the current global protected area network and the application of systematic conservation and management planning approaches for protected areas. The currently “competing” approaches for identifying gaps in the global protected area network and for planning new protected areas (one approach based primarily on Red List species data and the other relying on

habitat characteristics and landscape classification systems) have given rise to a lively debate in the peer-reviewed literature since the World Parks Congress in 2003.

Another interesting development this year has been SSC’s involvement in providing technical inputs to the review of the professional and recreational hunting industry in South Africa. The review looked at current hunting legislation, at its conservation impacts and at the placement of South Africa’s hunting industry in the larger context of regional and international best practices. The project was particularly relevant to SSC’s work with species and their sustainable use, and was an excellent example of the SSC network in action. We were able to call on the power of the SSC network from a number of directions, including advice from members and Chairs of the Antelope, Cat, African Elephant, African Rhino, Conservation Breeding, Sustainable Use, and Re-

introduction Specialist Groups, among others. This information provided an important context for the South African Ministry, who were at first surprised that so many experts outside South Africa were not only interested in, but also knowledgeable about, the circumstances of their hunting industry – both positive and negative. We were also able to draw support from the IUCN Guidelines on Sustainable Use, the IUCN publication on the Precautionary Principle and two recent Recommendations from the last WCC in Bangkok (RECWCC3.093 and RECWCC3.094), relating to the management of large herbivores in Southern Africa. Working closely with other IUCN members and partners in South Africa furthered the spirit of working to a “single” Programme.

Pressing single-species issues can be considered a constant backdrop to all of our work. In this past three months, some of the same species work reported previously has continued (including northern white rhinos, Tasmanian devils, Asian vultures, Saiga antelope, Asian elephants, and African lions) and been joined by others such as tigers in India (and the tiger bone trade in China), Amur leopards in Russia, and great apes, particularly gorillas, in Central Africa.

It is interesting to note that every one of these issues usually involves the Secretariat (often from the Director General’s level), IUCN members and the Commission, its Specialist Group Chairs and members. They become complex mixtures of politics and science, where a great deal of transaction cost is incurred through the depth of information which needs to be provided and the cautious manner in which we must do so.

With patience, however, we are moving ahead slowly on all these issues and definitely building important partnerships with governments and other concerned parties as we go. We still feel it is a tremendous testimony to the SSC and the esteem in which it is held that there are probably very few critical species issues in today’s world that do not pass across our desks with a request for sound technical advice.

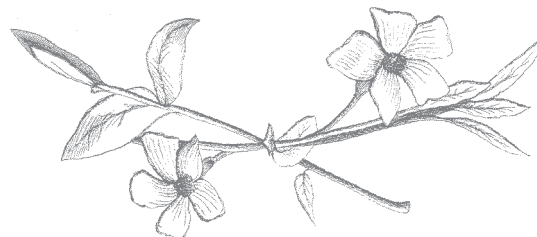
Lastly, we would like to thank our dedicated staff, as it is through their experience, institutional knowledge and hard work that we have completed such a successful first year in office.

HOLLY DUBLIN

Chair—IUCN Species Survival Commission

JANE SMART

Head—IUCN Species Programme



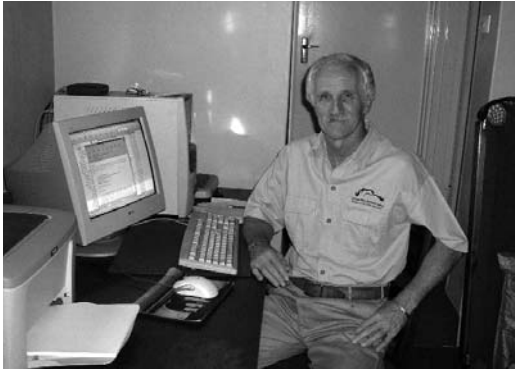
Spotlight on SSC's Unsung Heroes

THIS ISSUE OF *Species* is dedicated to profiling the men and women who drive SSC and the global species conservation agenda. All are chairs of SSC's Specialist Groups, Task Forces or Working Groups covering species from polar bears to orchids. They devote their time and energy on a voluntary basis to coordinate the work of their respective groups of experts, ensuring their collective knowledge and expertise feeds into the broader conservation agenda. All are committed to reversing the extinction crisis by providing the science and knowledge needed for sound conservation action, for species and their habitats.

These profiles aim to highlight the expertise, enthusiasm, and commitment shown by these leaders who have an immense impact at all levels, from running grass-roots projects to influencing global conservation policy decisions.

Among the profiles emerges a fascinating range of work including guiding field projects on Asian rhinos, reintroducing bison to former natural habitat, running breeding programs for tapirs, devising ways to reduce human-wildlife conflict, and advising on sustainable harvest levels for a wealth of species from crocodiles to medicinal plants.

African Rhino **Martin Brooks**



When the African Rhino Specialist Group (AfRSG) was formed in 1991, Martin Brooks assumed the chairmanship. His association with African rhinos had begun more than 10 years earlier when he was an ecologist with the Natal Parks Board in the Hluhluwe and Umfolozi Game Reserves. Martin's entire career was spent with this organization, which later became Ezemvelo KZN Wildlife, until his early retirement as an executive director in 2004.

The 30 to 40 AfRSG members represent a mix of scientific experts and field practitioners.

"The conservation context in which we work has one of five African rhino subspecies conserved almost exclusively in areas managed by either State authorities or the private sector, and where the taxa are either on the brink of extinction – the West African black and northern white rhinos – or are recovering towards long-term viability," explains Martin.

"All are rated as Critically Endangered except the southern white rhino which now numbers over 11,000. Biological management to enhance population growth, translocation to expand distribution into areas within their historical range and security are therefore the major foci. The effective implementation of rhino programs is facilitated by the inclusion and active participation in the Specialist Group of representatives of all the major Range States and conservation agencies, including the private sector."

Most of the immediate challenges facing Africa's rhinos and therefore the Group relate to the SSC objective to use scientific information to influence policies and management decisions. The revision of the South African Black Rhino Plan is nearing completion, and those of other Range States will soon be evaluated. Extensive guidance is, and will continue to be given, and techniques refined to ensure that populations are effectively monitored and managed to optimize population growth rates and ensure accurate population estimates. Following on from the 13th Conference of the Parties to CITES in 2004, the Group will be compiling a report on the status of Africa's rhinos and submitting it to the CITES Secretariat in advance of all their conferences. This should maintain the international profile of these critically important taxa. Major funding agencies will continue to be assisted in determining priorities and identifying the significance of projects to long-term taxon conservation. The AfRSG will continue to provide high-level strategic advice for all Africa's rhinos, but particu-

Major funding agencies will continue to be assisted in determining priorities and identifying the significance of projects to long-term taxon conservation



larly for areas where rhinos are close to extinction. The political neutrality of the IUCN SSC and the non-partisan views of its rhino specialists are often required to broker agreements or provide strategic direction.

The Group also focuses on promoting conservation by biodiversity users – SSC objective two. Priorities include refining conservation models that are appropriate for rural African communi-

ties, and an evaluation of the controls and approach adopted for black rhino trophy hunting by South Africa. SSC's objective relating to capacity building will be addressed through extensive advice, both strategic and technical, given to the Range States, and the extensive transfer of knowledge that will occur at the AfRSG's biennial meetings in 2006, 2008 and 2010. Emphasis is

placed on assisting the Range States to develop their own "critical mass" of expertise as this will provide increased self-sufficiency in decision-making and help increase the profile of rhino conservation in their countries.

Afrotheria

Galen B. Rathbun



Galen Rathbun's research career has focused on mammalian behavioral ecology and conservation, including a long-standing focus on African mammals. It was therefore a logical step in 2002 to gather like-minded colleagues to form the Afrotheria Specialist Group. The Group's focus is on the smaller and lesser known afrotheres (hyraxes, aardvark, sengis, tenrecs, and golden moles) because the larger representatives (elephants and sea cows) have their own Specialist Groups.

"Most people, including many biologists, are not familiar with the smaller afrotheres, much less their conservation issues, so foremost is a need to educate people. We will continue to focus much of our educational effort through our website (<http://www.calacademy.org/research/bmammals/afrotheria/ASG.html>), where our newsletter can also be found," says Galen.

"Next year we will fill the golden mole and tenrec gaps on the website, and continue to update other sections. We also plan on producing one or two

newsletters a year, which reach readers in Africa who do not have Internet access. Popular magazine articles will also continue to be an important educational tool, and next year one of our members will write a popular article on tenrecs for *Africa Geographic magazine*."

"The second thrust for action for our Group is providing expert advice to all that seek it, including for the IUCN Red List and the Global Mammal Assessment. Of course the basis of our expertise is research, which our members will continue to pursue and we will continue to endorse, especially when it generates information useful to conservation efforts. Research is especially important because so little is known about afrotheres, and without information, conservation needs and priorities are difficult to define. As we gain a better understanding of afrotheres, we will explore ways of producing an integrated conservation plan for this unusual group of African mammals," explains Galen.

Amphibian

Claude Gascon



Dr Claude Gascon is Senior Vice-President for Regional Programs at Conservation International. He also holds a Visiting Professor position with the Department of Ecology at the Instituto de Pesquisas da Amazonia (National Amazon Research Institute) and is a research associate with the Biodiversity Programs at the National Museum of Natural History. Prior to joining Conservation International, Claude was the project director and scientific coordinator for the Biological Dynamics of Forest Fragments Project (BDFFP) in Brazil for six years. He also directed a large-scale research and conservation project investigating the distribution and abundance of vertebrate species in the southwestern Amazon region.

Claude completed a master's degree in Ecology at Université du Québec à Montréal in Canada and his doctorate in Ecology at Florida State University. His research areas include biodiversity patterns and causes and Amazonian biodiversity, especially amphibians. Claude's research has resulted in more than 50 publications and two books on conservation and forest fragmentation in the Amazon, amphibians, and wildlife management.

Together with his co-chair, Dr Jim Collins, the Amphibian Specialist Group's priority for the current quadrennium is to implement the Amphibian Conservation Action Plan (ACAP) which arose

As we gain a better understanding of afrotheres, we will explore ways of producing an integrated conservation plan for this unusual group of African mammals



from the September 2005 Amphibian Conservation Summit. The Plan calls for immediate action on:

- Expanded understanding of the causes of amphibian declines and extinctions
- Ongoing documentation of amphibian diversity, and how it is changing
- Development and implementation of long-term conservation programmes
- Emergency responses to immediate crises

“The Action Plan is the most ambitious programme ever developed to combat the extinction of species. Such a response is necessary because the amphibian extinction crisis is unlike anything that the modern world has previously experienced, and a large proportion of amphibian diversity remains undocumented,” says Claude.

“The ACAP will require the international community to enter uncharted territory and to take great risks. But the risks of inaction are even greater. There needs to be unprecedented commitment to implementing the Amphibian Conservation Action Plan with accompanying changes in international and local environmental policies that affect this class of vertebrate animals. Otherwise, the ‘canaries in the global coalmine’ will continue to disappear,” he adds.

Arctic Plant Stephen Talbot



As a vegetation ecologist for the national wildlife refuge system in Alaska, Stephen Talbot designs, performs, analyzes and synthesizes scientific studies of the flora and vegetation and their relationship to the environment. Previously, he studied the flora and vegetation of Canada’s Northwest Territories. For the past several decades, he has concentrated on the vegetation of the Alaska Peninsula and the Aleutian Islands including the investigation and comparison of plant associations in the North Pacific.

Stephen also serves as a US Representative and Chair of the Arctic Council’s Conservation of Arctic Flora and Fauna (CAFF) Flora Group (CFG) – an eight nation circumpolar flora and vegetation forum (www.caff.is). This Group’s goal is to promote, encourage, and coordinate internationally the conservation of biodiversity of Arctic flora and vegetation, habitats, and research activities in these fields and to enhance the exchange of information relating to Arctic flora and vegeta-

tion and factors affecting them. The opportunity to work cooperatively with the IUCN will strengthen this goal.

In 1999 the CFG published the *Atlas of Rare Endemic Vascular Plants of the Arctic* as CAFF Technical Report N°3. This identified 96 rare species endemic to the Arctic, established an annotated list of these species, and determined the level of protection afforded these plants.

“At the 3rd International CAFF Flora Group Workshop in Helsinki, Finland, May 2005, we began a re-evaluation of the list, particularly species that might be classed as Vulnerable within the IUCN Red List. Fifteen Arctic species were identified as candidates. Over the coming year we plan to compile further data for the IUCN Red List on each of these species and make recommendations as to their conservation,” says Stephen.

Asian Rhino Nico Van Strien



Nico Van Strien has been with the Asian Rhino Specialist Group from its first meeting in 1979, first as a member and since 1993, as one of the Program Officers. For the current intersessional period the structure of the Asian Rhino Specialist Group (AsRSG) has been changed and a functional subdivision between Southeast and South Asia has been instituted with a dual leadership. “I will concentrate on Southeast Asia and the issues related to the Javan and Sumatran rhinos and the South Asia Co-chair, who will be appointed in the near future, will deal with Indian rhino conservation in India and Nepal,” says Nico.

As before, the AsRSG will concentrate on providing guidance and support for field projects and field personnel, as the survival of the Asian rhinos depends mostly on the dedication and hard work of countless anonymous guards and field workers. The Group will be smaller than previous years but will review options for attracting members from the Asian rhino horn consumer countries to assist in the reduction and eventual elimination of the rhino horn market in East Asia.

For the Indian rhino, the recovery of the populations in Nepal, once the hostilities have ended, and range expansion to former and new habitats in India are the main challenges for the near future. The successful recovery of the Indian



rhino from a state of near extinction a century ago, has so far not been duplicated with the other two Asian species. Both the Javan and the Sumatran rhino populations are still at critically low levels, but good progress has been made to stop the decline and there are early signs of a recovery. The Group will focus on improving the co-operation and coordination between range states and non-range states to continue and accelerate the recovery of the Javans and Sumatrans to viable levels, through ongoing and new *in situ* and *ex situ* efforts. Even if all goes as desired, the Asian Rhino Group will have more than enough to do for the next century.

Bear Co-Chairs Dave Garshelis & Bruce McLellan



Dave Garshelis (pictured left) studied American black bears for his master's degree and sea otters for his doctorate. Since 1983 he has directed the bear research program for the Minnesota Department of Natural Resources, with a primary focus on population monitoring. Dave has been co-chair of the Bear Specialist Group since 2004 and hopes to help steer the Group toward better population monitoring.

"Instead of attempting to obtain population estimates, often at great expense but with little precision, the aim should be toward discerning

population trend and understanding the factors most closely associated with that trend. In many circumstances, this can be accomplished most efficiently by monitoring changes in geographic range, which can be done through sign surveys and interviews with local officials and residents. Sign surveys yield information on bear presence or absence

with respect to habitat condition, and local interviews are useful for evaluating the effects of poaching and for assessing people's attitudes toward bears," explains Dave.

The Bear Specialist Group is in the process of developing standardized approaches for these efforts, as well as collecting presence/absence data that currently exist from a variety of sources such as camera trapping. Greater awareness of

bear conservation issues can be gained, and capacity building enhanced, by involving many participants, which is why the Group has expanded its membership to include representatives of nearly all countries inhabited by bears. Some members are not bear experts *per se*, but the knowledge and opinions they share, and the information they gain by being part of this Group can only be of benefit to global bear conservation.

Bruce McLellan has studied the ecology and conservation of grizzly bears in southern Canada since 1978. After completing his master's in 1983 and doctorate in 1989 on this research, he began working for the B.C. Ministry of Forests Research Branch. Since that time, he has continued research on grizzly and American black bears as well as the ecosystem of wolves, moose, and threatened mountain caribou. In 1998 he became the president of the International Association for Bear Research and Management, a group of over 700 biologists from over 40 countries. This group is dominated by North Americans, where most research and intensive management of bears occurs, but during his term, Bruce worked toward including more biologists from other parts of the world where more bear species occur but their status is less secure. As a Bear Specialist Group co-chair, he has tried to continue working with biologists that live in the many counties that have bears. He believes that improved communication among biologists will lead toward improved conservation strategies and greater confidence in their implementation. The Group now consists of 11 expert teams covering the species (geographic portions of some species) and themes such as captive bears and the trade in bear parts. Each team has two co-chairs and these all belong to a coordinating committee. Within this structure the chairs and other members have the opportunity to communicate on conservation strategies and implementation plans.

Bison (North American) C. Cormack Gates



Cormack Gates is Associate Professor of Environmental Science in the Faculty of Environmental Design at the University of Calgary, Canada. He holds a PhD in Animal Science (*Wildlife Productivity and Management*) from the University of Alberta and worked as a research and management biologist with the Government of the Northwest Territories, Canada for 18 years before joining the University of

Local interviews are useful for evaluating the effects of poaching and for assessing people's attitudes towards bears

Calgary in 1998. Cormack is a well-known large mammal ecologist and has been involved in bison conservation since 1983.

The genus *Bison* is represented by two species, one indigenous to Europe (*Bison bonasus*) and the other to North America (*Bison bison*). Conservation challenges facing North American and European bison differ substantially, warranting the establishment of separate sections.

The European bison exists primarily in small or very small free-ranging and captive herds, numbering about 2,900 in total in 2000. Political unrest and war were the primary causes of its decimation in the late 19th and early 20th centuries. Fewer than 20 survived by the mid 1920s and all wild European bison populations were extirpated, leaving a very restricted gene pool and a difficult legacy for subsequent recovery. In contrast, about 500 bison survived intensive subsistence and commercial exploitation during European settlement of the interior of North America in the 19th century.

The Bison Specialist Group for North America consists of more than 50 individuals representing state/provincial/territorial, federal, aboriginal, and private interests, and spanning three nations: Mexico, the United States, and Canada. The Group is developing a bison conservation strategy that will provide support and guidance for policy development, and conservation planning and implementation for public and private sector projects.

Bison (European) **Wanda Olech**



Dr. Wanda Olech is professor in the Department of Animal Breeding and Genetics at Warsaw Agricultural University specializing in population and conservation genetics and European bison breeding and management. She is interested in the genetic aspects of small closed populations, especially the influence of inbreeding on survivorship. The main goal of her studies is a complex pedigree analysis of the European bison population. Wanda is responsible for the mating program for the Polish captive population and coordinates the European Endangered Species Programme/European Association of Zoos and Aquaria program for this species.

Wanda is involved in bison reintroduction projects in the Carpathians and other sites in Europe. She is author of more than 35 scientific papers

and articles and runs courses on conservation genetics, biodiversity, and statistical and experimental design.

The SSC Action Plan for European Bison was published in 2004 and now the Bison Specialist Group (BSG) must concentrate on its implementation, says Wanda.

The main aims of the European part of the BSG are:

- Saving the genetic diversity within the species by using, in breeding programs, those animals which are unique gene carriers detected using pedigree and/or DNA analysis. This needs cooperation within captive herds (40% of the population) and reintroduction projects.
- Upgrading the status of the captive part of the species in many countries in Europe - the protection of the whole species is very much dependent on the *ex situ* part of population.
- Preparing rules for European bison transport and organizing an international group working on health problems of bison. The BSG will cooperate with the SSC Invasive Species Specialist Group to develop a strategy to decrease the number and negative influence of American bison in countries where free-living European bison populations exist.
- Providing diverse information on bison conservation via the BSG website.

Cactus and Succulent Plant

Héctor M. Hernández



Héctor M. Hernández has a degree in biology from the Faculty of Sciences, National University of Mexico, and a PhD from Saint Louis University and the Missouri Botanical Garden, Saint Louis Missouri, USA. He was curator of the National Herbarium (1987-1988), head of the Botany Department (1994-1995) and more recently (1995-2003) director of the Institute of Biology. Currently, he is senior researcher at this same institution. During the past 15 years, Héctor has been engaged in several research projects aimed at understanding the spatial patterns of cacti in the Chihuahuan Desert region. In particular, his studies have allowed him to detect areas of high cactus diversity in Mexico and to categorize the conservation status of a number of species. The results of some of his research projects were instrumental in the design of a protected area in northern Mexico, especially devoted to conserving cactus habitat.



The Cactus and Succulent Specialist Group (CSSG) is a global network of volunteers working towards the conservation and sustainable use of cactus and succulent plants. The Group currently includes among its members individuals with a diverse array of personal and professional profiles, ranging from professional botanists to plant amateurs and nursery owners.

“One of the central goals of the CSSG for the following few years is to advance in the evaluation of the conservation status of cactus and succulent

plants. Several group members are currently engaged in Red List assessments, and we hope to make substantial contributions to meeting the Convention on Biological Diversity’s Global Strategy for Plant Conservation

Target 2: A preliminary assessment of the conservation status of all known plant species, at national, regional and international levels,” says Héctor.

Another short-term goal of the group will be to establish a Code of Conduct for the collection, propagation, and trade of cacti and succulents. A significant number of species, corresponding to the rarest, most geographically restricted and horticulturally desirable species, have been greatly affected by illegal collecting activities linked to international trade. The development of an updated set of ethical guidelines would be extremely important to minimize illegal collecting.

Canid (foxes, wolves, jackals, and dogs)

Claudio Sillero Zubiri



Claudio Sillero Zubiri grew up in Argentina where he graduated in zoology before moving to Africa in the 1980s. His professional interests are conservation biology and behavioral ecology of carnivores, with a particular focus on wild canids. Claudio has been working on conservation of threatened species for 20 years, spanning four continents and working in many countries. In 1994 he received a doctorate from Oxford University for his work on the rare Ethiopian wolves, which was recognized by the 1998 Whitley Award from the Royal Geographical Society.

More recently, Claudio has become increasingly involved in the relationships between protected areas and their surrounding rural communities.

“This has led me to greater familiarity with biodiversity conservation policies and practices, culminating in current work on mitigating conflict

between wildlife and human interests,” he says.

Claudio’s position at the Wildlife Conservation Research Unit (WildCRU) in Oxford is funded by the Born Free Foundation, which generously supports the time and resources dedicated to the Canid Specialist Group.

“Last year was a watershed for the Group. We celebrated David Macdonald’s 24 years at the Canid Specialist Group helm by publishing a new multi-author Canid Action Plan and a companion book on the biology and conservation of wild canids,” says Claudio.

As the Group’s new Chair, Claudio’s goal will be to implement many of the projects and actions contained in the Action Plan and to continue developing the global network of canid biologists and conservationists by fine-tuning the regional and working group approach.

Caprinae (wild sheep, goats, and their relatives)

Marco Festa-Bianchet



Marco Festa-Bianchet received a PhD from the University of Calgary, Canada and completed post-doctoral studies in Cambridge. Having finally acquired some familiarity with the English language, Marco got a job at a francophone institution, the Université de Sherbrooke in Québec, Canada where he is a professor of ecology. His research involves long-term monitoring of marked individuals in several populations of mountain ungulates: bighorn sheep and mountain goats in Canada and Alpine ibex in Europe. He is interested in the consequences of variation in individual reproductive success for evolutionary and population ecology of large mammals. Recent work examines the effects of variation in sex-age structure on population dynamics, and the consequences of artificial selection through trophy hunting.

Marco is beginning his second term as Caprinae Specialist Group Chair. Major conservation challenges facing mountain ungulates include habitat destruction, over-grazing and disease transmission from livestock, poaching, and poor knowledge of taxonomy which makes it difficult to identify conservation units. Much attention has been focused on the economic, evolutionary and population consequences of trophy hunting, even though hunting is not such a big threat as habitat destruction or overgrazing by livestock.

The results of some of Hector’s projects were instrumental in the design of a protected area

Over the next few years, the Group's goals include an increased effort on collecting data from Asiatic species of mountain ungulates, which are the most endangered and the least known, and continued research on the effects of exotic diseases and alternative harvesting schemes. Ideally, this will include more training as wildlife biologists of young people from range states.

"We must also re-assess most Caprinae species, a daunting task given the widespread distribution, disparate sources of data and low level of financial support for species outside North America or Europe. An ongoing challenge is to increase the currently very small amount of funds that trickles down from tourist hunting to local conservation of mountain ungulates and their habitat," says Marco.

Cetacean (whales, dolphins and porpoises) **Randall Reeves**



Randall Reeves has been involved in cetacean research and conservation for just over 30 years. Fieldwork has taken him to the Arctic (Alaska, northern Canada and Greenland – mainly to observe narwhals and bowhead whales), West Africa (manatees), southern Asia (river dolphins, mainly in Pakistan) and South America (river dolphins) as well as many temperate parts of North America (right whales, bottlenose dolphins). More recently, Randall has spent a great deal of time in libraries and archives examining whaler logbooks and other old documents to help develop a clearer picture of what the world's oceans were like before modern whaling.

In 1997, when Randall was first appointed chair of the Cetacean Specialist Group, he was fortunate to inherit a functioning network of hardworking, dedicated colleagues whose efforts had been coordinated superbly over the preceding decade by Bill Perrin and Steve Leatherwood. The Group has continued to evolve whilst trying to manage long-standing challenges such as overhunting and bycatch in fisheries and responding to newly-recognized threats such as mortality (especially of the little-known beaked whales) caused by military sonar. Throughout the 1990s and early 2000s, the Cetacean Specialist Group played a prominent role in drawing world attention to the plight of freshwater cetaceans, emphasizing that water development policies have profound implications for the preservation of biodiversity.

The Group is intimately involved in three ongoing projects focused on Critically Endangered

cetaceans – Yangtze river dolphins (baijis), Gulf of California porpoises (vaquitas) and western Pacific gray whales.

"In all three cases, the animals are fully protected from deliberate harm, yet serious conflicts with human activities persist. More science will always be needed to improve our understanding of these species' biology, behavior and ecology. However, their fates will ultimately be determined by our ability to build coalitions among interest groups, galvanize governmental support and resolve what often seem like intractable differences in human values and world views," explains Randall.

Conservation Breeding **Robert C. Lacy**



Robert Lacy was trained in evolutionary biology, population genetics, and ecology. For the past 20 years, he has been employed as a Population Geneticist at the Chicago Zoological Society. He has conducted research on genetic change in managed populations, and developed techniques to manage zoo populations for maximal retention of diversity. In response to a request from Ulie Seal, former chair of the Conservation Breeding Specialist Group (CBSG), he developed simulation software for population viability analyses, to provide a tool for species risk assessment and conservation planning. Robert's close involvement with the CBSG led him to accept the role of chair when Ulie passed away in 2003.

The CBSG originally focused on helping zoos improve management of their animal populations. Yet, while zoos were becoming better at managing captive populations for long-term viability, many wildlife populations outside zoos have become dependent on interventive management. The CBSG now works to provide tools and advice on the conservation of species that need intensive management, whether in the wild, semi-wild, or captivity.

"Our current priorities include further developing modeling tools for species risk assessment, including techniques for integrating diverse kinds of knowledge (population ecology, genetics, epidemiology, landscape change, human impacts); developing facilitated processes for helping organizations collaborate to identify species conserva-

Throughout the 1990s and early 2000s, the Cetacean Specialist Group played a prominent role in drawing world attention to the plight of freshwater cetaceans



tion programs where they can have major positive impacts; and training conservationists in risk assessment and facilitation tools,” says Robert.

“To help us achieve these goals, we are working to strengthen national and regional networks, where people with the knowledge of the local biodiversity, conservation issues, and languages and cultures take responsibility for protecting their species. We also see a need to continue to develop stronger linkages with other SSC Specialist Groups, so that we can call upon each other to provide knowledge and expertise,” he adds.

Coral Reef Fishes

Terry Donaldson



Terry Donaldson is serving his second term as Chair of the Coral Reef Fishes Specialist Group and is leading the Global Assessment of Reef Fishes under the auspices of the IUCN/SSC Global Marine Species Assessment.

Terry is currently on the graduate faculty of the University of Guam Marine Laboratory (UOGML) where he serves as the ichthyologist (fish biologist). He earned a Doctor of Philosophy degree in Evolutionary Biology and Systematics (Ichthyology) at the Louisiana State University Museum of Natural Science and was both a Japanese Society for the Promotion of Science (JSPS) Research Fellow and US National Science Foundation-JSPS Research Fellow at Kyushu University in Japan.

Terry has trained in ichthyology, behavioral and historical ecology, biogeography, and fisheries biology, and specializes in reef and insular freshwater fish behavior, biogeography and diversity, ecology, and extinction risk analysis. He has over 25 years of experience working on reef systems, mainly in the Indo-West Pacific region, has led or participated in several research expeditions, and has produced more than 50 publications on fish biology. He is a member of the American Society of Ichthyologists and Herpetologists, the Ichthyological Society of Japan, the Society for Conservation Biology, the American Society of Naturalists, and the Pacific Science Association. Terry is also a Member of the Board of the Society for the Conservation of Reef Fish Aggregations. Previously, he served as Senior Scientist and Director of the Integrative Biological Research Program of the International Marinelife Alliance, located also at the UOGML.

Crane

George Archibald



Since first encountering cranes in northwest Canada in 1965, George Archibald has been involved in the study and conservation of these charismatic birds.

His doctoral research at Cornell University involved the ethology and evolution of cranes. In 1973, George and his colleague at Cornell, Ron Sauey, co-founded the International Crane Foundation (ICF) in Baraboo, Wisconsin. George was President of ICF until 2000, when he passed the position to his former Deputy Director for Programs, Jim Harris. ICF has grown to include 50 employees and helps support field conservation projects in 44 nations. George continues to work full time for ICF and concentrates on programs related to the conservation of the Korean Demilitarized Zone and to the restoration of Siberian Cranes in west Asia. He lives in the countryside near Baraboo, and together with his wife, Kyoko, enjoys gardening and aviculture. He spends approximately half of his time traveling to various meetings and field projects.

George has led the SSC's Crane Specialist Group since 1972. He and his colleagues at ICF and abroad have encouraged the formation and growth of working groups including for the European crane, Eurasian crane, North American crane, Indian crane, China crane, and Siberian crane, and for the African Wattled Crane Programme, and Wetlands and Waterbirds. Several hundred people from a diversity of backgrounds yet united through a shared interest in cranes, are involved in these groups.

“Major challenges include destruction of wetlands and grasslands, changes to hydrology of protected areas, the illegal traffic of cranes in Africa, and the hunting of cranes in several west Asian nations”, says George.

Crocodile Grahame Webb



In 1973 Grahame Webb (pictured left) finished his PhD in zoology and started research on saltwater crocodiles (*Crocodylus porosus*) in the Northern Territory of Australia. This involved working in Aboriginal lands with local communities. Australian freshwater crocodiles (*C. johnstoni*) were added to the research agenda in 1976–78, the same year he formed Wildlife Management International as a private vehicle for pursuing his research, conservation and management interests.

“Originally committed to the conservation problem of rebuilding depleted wild populations, by 1980 the focus changed to management: finding incentives for local people to tolerate the increasingly abundant crocodile population,” says Grahame.

“Experiments with sustainable use and economic incentives proved remarkably effective, paving the way for a complete recovery of the wild crocodile populations in the Northern Territory. But in the early 1980s consumptive use was a politically sensitive issue and so winning support from CITES was difficult. Based on the mixed experience of science, research, conservation, management, Aboriginal communities, sustainable use and increasingly ‘biopolitics’, I was, and still am, able to work in different countries on a variety of wildlife species. Within the IUCN, my primary involvement has always been with crocodilians, sustainable use and over the last decade, with marine turtles”.

“As chair of the Crocodile Specialist Group (CSG), I see my central goal as one of assisting IUCN and SSC to meet their missions with regard to crocodilians – some 23 species and subspecies distributed in about 100 countries. The problems for world crocodilians range from strictly conservation of Critically Endangered species, to strictly management of abundant species. The situation is complicated when the same species is Critically Endangered or extinct in one part of its range, but at carrying capacity in another, or when status in one area changes over time. CSG members are extremely diverse, ranging from strictly academic

to strictly commercial backgrounds, which allows a multidisciplinary approach to any problem we address. The members are united in their concern about the conservation and sustainable use of crocodilians, and in their willingness to donate time and resources to help CSG activities. The CSG and its members get involved in capacity building through various training programs and review missions.”

Grahame is regarded by many as one of the world’s leading authorities on crocodilian research and management, and on the concept of conserving wildlife through sustainable use programs. In 2001 he was awarded the prestigious Clunies Ross National Science and Technology Award for his contribution to a new vision

for wildlife conservation based on sustainable use. In 2003 he was awarded an Australian Centenary Medal, for his contribution to crocodile research and to the establishment of The Essington School in Darwin.

Deer

Susana González



Susana González was born and raised in Montevideo, Uruguay. During her youth Susana’s father planned a trip around the whole country when she discovered the Rocha wetlands and marshy habitats housing impressive bird diversity and home to the last remaining pampas deer populations.

In 1998, Susana received her Bachelor’s Degree in Biology from the University of Uruguay. During a class field trip, she again visited the Rocha wetland, as an example of a Ramsar site, and discovered the pampas deer populations. From then on she began to focus her research on the two Uruguayan pampas deer population and their conservation. She realized that not only scientific research would be important for the survival of these residual populations, but that all stakeholders must be involved. With a colleague she held the first pampas deer Population and Habitat Viability Assessment workshop, with the help of the SSC Conservation Breeding Specialist Group.

Susana completed a doctorate in genetics from the Programme for the Development of Basic Sciences (PEDECIBA), Uruguay and specialized in conservation genetics of endangered deer and other neotropical mammal species in Uruguay.

By 1980 the focus changed to management: finding incentives for local people to tolerate the increasingly abundant crocodile population

Currently, she is an Assistant Professor in the Faculty of Science at the University of Uruguay and Associate Researcher of the Biological Research Institute “Clemente Estable”. She has also been appointed assessor of the Conservation Pampas Deer Group of the Natural Resources Department of the Uruguayan Ministry of Livestock and Fisheries.

Susana is leading the Group in working on world deer conservation initiatives and stimulating research and knowledge of *in situ* and *ex situ* conservation.

“In this quadrennium we will focus on reinforcing our membership, which must be interdisciplinary, to ensure that decisions and policies affecting deer populations are influenced by sound interdisciplinary scientific information. We will share our expertise and have an input to the Global Mammal Assessment, the Red List, and CITES, and advise on on-the-ground initiatives to help solve conflict situations common in deer conservation,” says Susana.

One of the main goals of the DSG is to disseminate new information generated both in the field and in the laboratory using several strategies (see www.iibce.edu.uy/citogenetica/deer). The Group is also preparing a new book *Neotropical Cervidology*.

“Two main challenges we need to face are stimulating research in the “hotspot deer diversity regions,” Asia and Latin America to evaluate the species’ status and propose conservation guidelines. We also need to address the over-abundance of deer in some regions of the northern hemisphere by understanding population dynamics and emerging diseases, and proposing management measures,” says Susana.

All these issues will be discussed at the 6th International Deer Biology Congress, Prague, Czech Republic August 7–11, 2006 with its theme ‘Deer in a Changing World’. Further information on the Congress is available at www.af.cz/cz/idbc and on the DSG website.

Equid (zebras, asses and horses)

Patricia D. Moehlman



The long-term goal of the Equid (zebras, asses and horses) Specialist Group is to conserve biological diversity by developing and executing programs to study, save, restore, and manage wisely wild equids and their habitats. In an effort to achieve this goal, priorities are:

- to identify and work with scientists, government personnel, and local residents in the countries where wild zebras, asses, and horses exist,

- to help raise funds for equid research and conservation programs,
- to secure funding for the training of nationals in equid range states,
- to coordinate with and assist other Specialist Groups, and;
- to implement the actions recommended in the new *Equid Action Plan*.

The new *Equid Action Plan* was published in 2002 and was distributed to all range states, wildlife management personnel, and members of the Equid Specialist Group as well as being made available at: www.iucn.org/themes/ssc/sgs/equids

Wild equids were once among the most abundant herbivores in Africa and Asia. Today there are only seven species of equids and most of these are Endangered.

“Our greatest challenge is to improve the conservation status of these species and their habitats. We need to have a better understanding of basic biology, seasonal movements, interactions with livestock, and the dynamics of the arid ecosystems in which they live. The survival of individual species is dependent on conserving critical resources and entire ecosystems. A priority for achieving this goal is to provide training for range state nationals in behavioral ecology, population dynamics, and ecosystems ecology. We have had some success in the case of the Critically Endangered African wild ass where support has been secured for colleagues from Eritrea and Ethiopia,” says Patricia.

Wild equids occur in grasslands ranging from savannas to the world’s most arid deserts. They share these landscapes with people and their livestock. By using an ecosystem approach, the research and conservation programs on endangered wild equids will investigate how all physical and biological components interact. Such an approach also allows research personnel, wildlife managers and policy makers to analyze alternative strategies for how wildlife and pastoralists can co-exist.

Flamingo

Brooks Childress



Following a 27-year business career in the US and England, Brooks Childress began a new career in biodiversity conservation. He undertook postgraduate research at the University of Leicester, UK, leading to a PhD in Biological Sciences in 1998. Since receiving his degree, he has served

simultaneously as honorary Research Associate at the Wildfowl & Wetlands Trust, Slimbridge, UK and in the Department of Ornithology, National Museums of Kenya, Nairobi, Kenya.

From 2001 to 2004 Brooks conducted biometric (the application of statistical methods to biological facts), behaviour and satellite tracking studies of the lesser flamingo in East Africa. As part of this work, he developed, funded and implemented a multi-year satellite tracking study, instituted an ongoing ringing programme, and developed the first biometric database by age and sex for wild lesser flamingos, amongst other projects. Brooks was appointed chair of the Flamingo Specialist Group in November 2004.

Our efforts will be focused on the development of conservation action plans for the three most threatened flamingo species

During the past year, the Group has substantially increased its capacity to provide timely, innovative, and practical solutions to flamingo conservation challenges. Membership has been increased from 39 to 166, with representatives from 49 countries involved in the study, monitoring, management and conservation of the world's six flamingo species, both in the wild and in captivity. All members of the Group are now linked by a new Flamingo Specialist E-Group (an e-mail list-serve), and a reformatted annual bulletin. A new website is planned for 2006. During 2005, the Group has contributed to the revised flamingo Red List information sheets, and provided updated population estimates for the new edition of Waterbird Population Estimates, No. 4, helping to ensure that decisions and policies affecting flamingo conservation are influenced by the latest scientific information.

"During the remainder of the 2005–2008 inter-essional period, our efforts will be focused on the development of conservation action plans for the three most threatened flamingo species – the Andean and James's flamingos of the high Andes in South America, and the lesser flamingo of Africa and Asia – and obtaining endorsement of these plans by the appropriate conservation conventions and range state governments," says Brooks.

"These plans will encompass scientific assessments of the current population status, distribution, conservation status, conservation threats and necessary conservation measures for each of these threatened species, to ensure that decisions and policies affecting their conservation are influenced by sound interdisciplinary scientific information," he adds.

Freshwater Fish

Gordon McGregor Reid



Gordon McGregor Reid is Director and Chief Executive of Chester Zoo (The North of England Zoological Society), which is an independent charity for conservation, education and science. It receives no state subsidy and the main income is from visitors and commercial sponsorship. The Zoo owns about 200 hectares, and is the leading wildlife attraction in the UK with well over one million paying visitors each year and about 6,000 animals of 500 species (approximately half of which are on the IUCN Red List). Since 1995, under the present directorship, the Zoo has experienced an unprecedented period of business growth and prosperity. The conservation outreach work of the Zoo now spans 48 countries in all five continents.

Gordon is a graduate of the University of Wales, Cardiff (BSc Zoology & Psychology, 1974) and in 1978 he gained a PhD in Comparative Anatomy and Systematics from the University of London via the British Museum of Natural History. The author of more than 150 published works, his research interests include taxonomy, zoogeography and conservation biology, particularly in relation to fishes and aquatic habitats. For this research contribution, Gordon was awarded a Fellowship of the Institute of Biology. A new species of fish from the Congo rainforest (*Labeo reidi*) has been named in his honor.

Gordon has extensive field experience in Africa, Central and South America, India, the Middle and Far East and has acted as a consultant for Conservation International, Fauna and Flora International, and the World Wide Fund for Nature (Korup Project, 1989; Gashaka Gumti Project, 1995). He has worked for Voluntary Service Overseas (refugee resettlement in Nigeria and Botswana) and British Executive Service Overseas (zoo consultancy, Eastern Europe and Bolivia). In 2004, Gordon became the elected President of the Linnean Society of London – the world's oldest learned society for botany and zoology, the place where Darwin and Wallace delivered their original paper on the Origin of Species.

Fungi
Anders Dahlberg



Dr Anders Dahlberg is a mycologist at the Swedish Species Information Centre where he coordinates the compilation of taxonomic and ecological information on Swedish fungi, Swedish fungal Red Listing and the incorporation of fungal conservation issues into management and conservation plans. Anders is also researching fungal population dynamics and saproxylic fungal ecology. On behalf of the European Council for Conservation of Fungi, he was involved in the preparation of a proposal to include 33 larger fungi in the Bern Convention.

The new Fungi Specialist Group is being formed and will consist of a balanced representation of a number of active mycologists from all parts of the world with an interest in nature conservation. All

represent well-established networks among colleagues within their geographical area of expertise. The greatest priority of the Group will be to produce a *Status Survey and Conservation Action Plan for Fungi* before 2008. This will consist of a taxonomic and ecological overview of micro- and larger fungi as well as an analy-

sis of threats to fungi. Also included will be an evaluation of key habitats for fungi and their specific threats, and recommendations for action. The Report will provide a regional overview and provide guidelines for the applications of IUCN Red List Categories and Criteria to fungi. The Fungi Specialist Group will take part and contribute to the Red-Listing process of European larger fungi that is about to begin.

The greatest priority of the Group will be to produce a Status Survey and Conservation Action Plan for Fungi before 2008

Galapagos Plant
Alan Tye

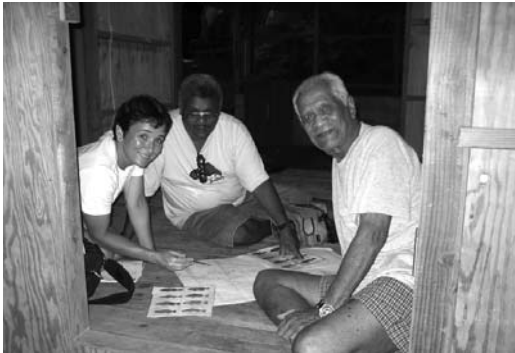


Alan Tye is currently Head of the Botany Department at the Charles Darwin Research Station, Galapagos, Ecuador. His research interests extend to conservation biology; ecology, systematics and conservation of threatened plants; invasive plant ecology; evolution on islands; and bird behavioral ecology. He has found that much of the work undertaken by the Galapagos Plant Specialist Group corresponds nicely with the botanical program of the Charles Darwin Research Station. This includes a baseline survey focused on endemic and threatened plants, long-term monitoring of threatened species and communities, prioritization (using the Red List among other tools), studies of priority taxa (mostly those that are Critically Endangered) and experimental management in the form of protection and restoration projects.

These programs are used to guide management decisions taken by the Galapagos National Park. However, an added value of having the Galapagos Plant Specialist Group present is the Red List authority provided, whose assessments are based on the information that is acquired from these programs. Aside from the big conservation challenges of reversing declines and improving the status of species, which are the continuous jobs of the Research Station Botany Department, a specific challenge for the next few years is to broaden its program to include non-vascular plants. To that end the Station has employed a non-vascular plant specialist and is collaborating with others, in the hope of getting Galapagos endemic lichens, mosses and liverworts, and marine algae assessed for the IUCN Red List in the next two to three years.

Groupers and Wrasses

Yvonne Sadovy



Yvonne Sadovy was invited to form the Groupers and Wrasses Specialist Group (GWSG) in 1998 following concern arising from the listing of a number of groupers (Serranidae) and wrasses (Labridae) on the 1996 IUCN Red List. The underlying activities of the Group will continue to involve species assessments for the hundreds of species involved, and within this quadrennium the Group plans to complete a publication and statement on the state of grouper species, globally. It produces a twice-yearly newsletter which can be found at: <http://www.hku.hk/ecology/GroupersWrasses/iucnsg/index.html>

“There are three other major components that shape our work. The first is an ongoing campaign for better protection of one of the largest of reef fish, the humphead wrasse, or Napoleon fish (*Cheilinus undulatus*) www.humpheadwrasse.org which is a valuable part of the trade in live reef fish for food in South East Asia. This species was little known a decade ago, but, through an initiative to synthesize all available data and a multi-year campaign, it was finally listed on Appendix II of CITES in November 2004. The Group is now working with TRAFFIC and the Indonesian government to develop a sustainable management plan for this major exporter of the species, and is addressing CITES implementation issues with its major importer, Hong Kong, China. For this work, we are conducting trade and underwater surveys in Indonesia, and will also be joining WWF-HK on a consumer campaign to promote sustainable seafood consumption in Hong Kong,” explains Yvonne.

“A second aspect of our work is conducted with a sister organisation, the Society for the Conservation of Reef Fish Aggregations (SCRFA), formed in 2000. Since many reef fishes aggregate to spawn (reproduce), special focus on these particularly vulnerable times in the life history of many species can do much to progress their conservation and management. Since 2002, we have considerably raised the profile of the problems of exploiting spawning aggregations, especially those of groupers, by assembling a comprehensive database (www.scrfa.org) and running an information campaign. This shows very clearly that aggregations cannot withstand heavy levels of fishing pressure and that they need management, if exploited at all. We have also fostered statements of concern and calls for action in international forums in the last two years, one by the

Inter-tropical Marine Ecosystem Management Symposium No. 2, in 2003, and a second by the 4th IUCN World Conservation Congress in 2004.

One of our biggest overall challenges is the widespread perception that commercially-important marine fishes cannot be threatened with extinction. Our ongoing response has been to produce publications in the scientific and popular literature, as well as participate in conferences and other IUCN projects such as ‘Shatter the Myth’, to dispel this misconception and thereby gain support for fish conservation initiatives”.

Grouse

Ilse Storch



Ilse Storch is professor of wildlife ecology and management at Freiburg University, Germany. Her department’s research combines approaches of conservation biology, landscape ecology, and population modelling and genetics. The effects of anthropogenic habitat fragmentation on wildlife individuals, populations, and communities and their implications for conservation are a major focus of her work. Ilse also has been a consultant to wildlife conservation programs worldwide.

Ilse has worked on grouse since the mid 1980s. She had just completed her PhD when she became a founding member of the Grouse Specialist Group in 1993 and has been Chair since 1996. Building and strengthening the network of grouse specialists has been one of her major tasks, and the Group has grown to some 120 members from 30 countries. Under Ilse’s lead, the Group published the first IUCN Grouse Action Plan in 2000, and is presently working on an update for online publication.

Grouse are among the best-studied bird families, and the Grouse Specialist Group can build on a vast body of sound scientific information and expertise. Yet, several species and many local populations of grouse are threatened with extinction. Forestry, agriculture and urban development destroy or change habitats in a way that grouse often cannot adapt to. Clearly, grouse conservation is limited by human land use interests, and not by a lack of science.

Yet, available science is not always adequately accounted for in policy and management decisions. Therefore, a key task for the Group is to provide, collate and distil scientific knowledge and management experience to inform and influence conservation debates, and to support or initiate conservation action. Grouse are excellent

conservation flagship species, and due to their specialized habitat needs and large spatial requirements, good representatives of biodiversity in general.

Iguana

Co-Chairs Allison Alberts & Rick Hudson



Dr. Allison Alberts is Head of the Applied Conservation Division at the Zoological Society of San Diego, for which she oversees a multidisciplinary research effort that includes habitat restoration and management, reintroduction programs for threatened wildlife, and a seed banking program for endangered plants. She has served as Co-Chair of the Iguana Specialist Group since 1997 and is currently President of the International Iguana Foundation. Although her early research

concentrated on social communication in desert and green iguanas, since 1993 she has been carrying out applied research on the Critically Endangered rock iguanas of the Caribbean. Her work includes studies on the behavior and reproductive ecology of wild iguana populations, headstarting and translocation programs, and educational outreach. She is co-editor of the recent

volume *Iguanas: Biology and Conservation*, to which over 20 members contributed. She is also an active member of the Re-introduction and Conservation Breeding Specialist Groups.

Rick Hudson has been with the Fort Worth Zoo for the past 25 years where he managed the Herpetology Department before becoming Conservation Biologist in 2000. He has been instrumental in launching collaborative zoo-based reptile conservation programs with a primary focus on endangered iguanas and chelonians. Rick has been working with the Jamaican iguana recovery program since 1992, which received the American Zoo and Aquarium's International Conservation Award in 2000. He spearheaded the formation of the IUCN Iguana Specialist Group in 1997, has raised thousands of dollars for recovery efforts for Critically Endangered Caribbean rock iguanas, and now serves as Executive Director of the non-profit International Iguana Foundation. Rick has been

active on a number of Specialist Groups in the SSC network, most notably as Co-Chair of the Turtle Survival Alliance.

"The mission of the Iguana Specialist Group is to prioritize and facilitate conservation, science, and awareness programs that help ensure the survival of wild iguanas and their habitats. To achieve this, we sponsor, advise, and fundraise for programs that include population surveys, protected areas management, invasive species control, field research, genetic studies, education, and captive breeding/headstarting initiatives," explains Rick.

"Our highest priorities over the next several years include conservation planning and implementation in range countries, habitat conservation and management, capacity building to counter the threat of invasive species, and conservation outreach and awareness. We will continue to work closely with our in-country partners and sister organizations, the International Iguana Foundation and the International Reptile Conservation Foundation, to achieve our strategic goals."

Invasive Species

Mick Clout



Mick Clout (pictured left) is Professor of Conservation Ecology and Director of the Centre for Biodiversity and Biosecurity at the University of Auckland, New Zealand. He is the founding Chair of the Invasive Species Specialist Group (ISSG), and is involved in a wide range of international initiatives to prevent, eradicate and manage invasive species. Before joining the staff of the University of Auckland in 1993, Mick was Research Manager and Acting Director (Protected Species) at the New Zealand Department of Conservation. Prior to that he was a scientist with DSIR Ecology Division at Nelson, New Zealand. Mick is a vertebrate ecologist and has worked extensively on the behavior and control of invasive mammals and the conservation biology of native New Zealand birds that are threatened by introduced pests.

The mission of the ISSG is to reduce threats to natural ecosystems and the native species they contain, by increasing awareness of alien invasions and of ways to prevent, control or eradicate them.

"Unfortunately, invasive alien species threaten native biodiversity in virtually every ecosystem type on earth. However, my experience in active conservation biology – for instance in working to save the kakapo (New Zealand's flightless giant parrot), has convinced me of the many opportunities to fight back against this tide of biological inva-

Rick has been instrumental in launching collaborative zoo-based reptile conservation programs with a primary focus on endangered iguanas and chelonians

sions. ISSG not only advocates for special attention to invasives management, but also for consistent mainstreaming of invasive alien species issues into conservation, sustainable development and poverty alleviation,” says Mick.

ISSG's main activities include:

- ■ Providing technical and policy advice to assist IUCN, and to help where possible in the wider community. The overall challenge is to encourage invasive alien species issues to be addressed at local, national and international level, and to foster approaches that are strategic, empowering, and placed in an ecosystem context.
- ■ Co-ordinating and managing the Pacific programme of the Cooperative Initiative on Invasive Alien Species on Islands. This initiative, with funding support from NZAID, is a partnership of the Group, regional organizations and NGOs. It will focus on using ‘demonstration projects’ to develop management capacity, enhance cooperative actions and raise awareness.
- ■ Facilitating exchange of information and expertise, through publication of the *Aliens* newsletter, the Aliens-L listserv, and managing the Global Invasive Species Database (www.issg.org/database) which currently receives 50,700 hits per day. It is aimed to be a management and awareness tool, allowing communities to locally deploy globally-sourced best practice. The ISSG is a strong advocate for IUCN's work on the Conservation Commons.

**Korean Plant
Yong-Shik Kim**



Yong-Shik Kim holds both a master's degree and a doctorate in forestry from the Seoul National University, and has been teaching plant ecology at the Faculty of Natural Resources, Yeungnam University since 1983. Dr Kim studied the *ex situ* management of threatened plant species at the Royal Botanic Gardens, Kew and the University of Reading. He works for plant conservation in Korea in collaboration with SSC and Botanic Garden Conservation International, as well as on the management of botanical gardens and arboreta in Korea.

The Korean Plant Specialist Group has wide experience in networking and collaborating or recruiting within the country, as it was formed by

members from various governmental and non-governmental institutions within Korea.

“Over the next four years, we will continue to focus on Red List assessments for Korean plants and aim to finish the evaluation in this inter-annual period. The Group will also document areas of important plant diversity as well as prepare recovery plans for threatened plant species. This work will be carried out with close collaboration with the Korea National Arboretum,” explains Dr Kim.

Lagomorph (rabbits, hares and pikas)

Andrew T. Smith



Andrew Smith is a mammalian population biologist-behavioral ecologist turned conservation biologist, and continues to interweave these disciplines in his work. His “day job” is Professor of Conservation Biology at Arizona State University. He has made a career of working with pikas (genus *Ochotona*) both in North America and in Asia, and this connection originally drew him into the Lagomorph Specialist Group in 1978. He has served as Chair since 1991.

“There are many challenges facing the conservation of lagomorphs. During the next quadrennium the Group will attempt to census the many species for which we have little to no contemporary information. We will also complete our development of data input for the Global Mammal Assessment, and combine this approach with an update of the *Lagomorph Action Plan* to produce a commercially-available *Conservation Field Guide to the World's Lagomorphs*,” says Andrew.

“Many of our species provide important ecosystem services, and we will highlight the important interactions of lagomorphs in natural ecosystems. Habitat alteration and global warming appear to negatively influence many lagomorph species and populations. We plan to integrate these approaches, and to work closely with other Specialist Groups to present a comprehensive front for conservation action. Similarly, many lagomorph populations are at risk due to disease, and the loss of lagomorphs has affected food chains, often putting other endangered species, such as carnivores, at risk. We will develop increasing expertise in the role of disease and its effect on wild populations within the Lagomorph Specialist Group, which in turn will translate to broader conservation issues involving other taxa.”

**Many lagomorph populations
are at risk due to disease**

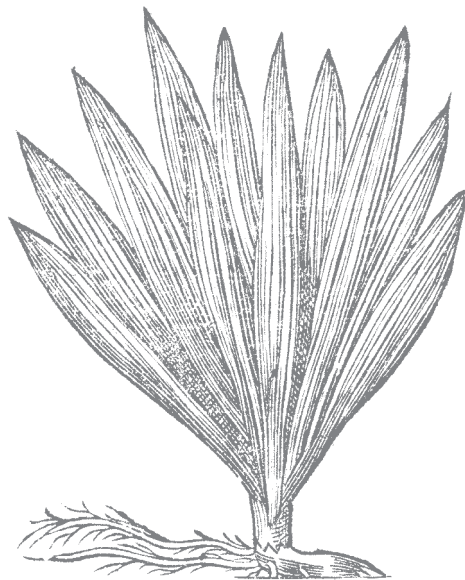


Madagascar Plant
Charlotte Rajeriarison



The Madagascar Plant Specialist Group was created in January 2002 and counts 40 national and international members. Since its creation, the Group has assessed the status of a number of Madagascar plant species for the IUCN Red List. With support from Conservation International Madagascar, species will continue to be assessed for future IUCN Red List updates. Currently, 68 species have been assessed and proposed for inclusion in the next Red List. Research on threatened species, especially those endemic and commercialized on the international market such as orchids, has also been undertaken.

The Group collaborates closely with different organizations and institutions including CITES, Missouri Botanical Garden, Conservation International, Museum National d'Histoire Naturelle in Paris and Royal Botanic Garden Kew. In future, the Group will focus on continuing the revisions of Malagasy species for the Red List. A Conservation Assessment and Management Plan on certain taxonomic groups, with the help of international specialists is being planned.



Macronesian Island Plant
Ángel Bañares Baudet



Dr. Ángel Bañares Baudet has been a botanist for over 25 years, working on diverse flora issues, particularly Crassulaceae taxonomy, mycology and conservation biology. His priority is the recovery of threatened flora on the Canary Islands and Ángel's research has focussed on the ecology of these species to contribute to necessary management measures.

**Priorities include preparing the Top 50
Macronesian Island species list**

Ángel recently assumed the chair of the Macronesian Island Plant Specialist Group, which consists of members from the four archipelagos of the Macronesian Region. The goal of the Group is to conserve the diverse flora of the region, and facilitate the development of programs to better understand and manage this flora.

Towards achieving this goal, the Group has established a number of objectives:

- ■ Develop a practical guide including strategies for the conservation and management of flora resources, particularly threatened species
- ■ Prepare the Macronesian Region Red List
- ■ Develop the Top 50 Macaronesian Island species list
- ■ Identify Important Plant Areas in the region
- ■ Develop a list of flora introduced on the Macronesian islands
- ■ Promote cooperation between the various states in the region (Portugal, Spain and Cabo Verde)

Marine Turtle

Co-Chairs Nicolas Pilcher & Roderic B. Mast



The Marine Turtle Specialist Group (MTSG) is widely recognized as the global authority on sea turtle conservation. With a voluntary membership of over 300 experts worldwide, the MTSG represents a vast wealth of scientific knowledge upon which to draw for the purposes of conservation. The Group envisions marine turtles fulfilling their ecological roles on a healthy Planet where all peoples value and celebrate their continued survival.

The Group's mission statement, "to develop and support strategies, set priorities, and provide tools that promote and guide the conservation of marine turtles and their ecological roles and habitats" underscores the Group's principles and guides its work.

The MTSG is staffed by two Co-Chairs, Nicolas Pilcher (pictured left) and Roderic B. Mast, and a full-time Program Officer, Brian Hutchinson. All three "took office" in May 2003.

Nick Pilcher is a British biologist who has worked extensively throughout the Middle East and Southeast Asia, and parts of the Pacific. His work not only concerns sea turtles, but also extends into marine protected areas, coral reef assessments and conservation, and the design of management and action plans for turtles and protected areas at a variety of scales. Falling into turtles quite by accident, Nick spent seven years studying them in Saudi Arabia and another five in Malaysia before graduating to the 'real world' and helping run and develop programmes in numerous countries since that time. Nick also served as President of the International Sea Turtle Society (ISTS) for 2003.

Roderic Mast is Vice President of Conservation International (CI). A marine biologist and cross-cultural administrator, Rod began his conservation career as a field researcher and a naturalist guide in the Galapagos Islands, and later served as Coordinator of the Western Atlantic Turtle Symposium / WATS I (San Jose, Costa Rica – 1983). He has done field research and conservation work on sea turtles in Georgia, USA, Rancho Nuevo, Mexico, Colombia, and the Galapagos Islands, and served as Program Officer for Sea Turtle Conservation at WWF-US for three years. Rod's work in biodiversity conservation at CI has focused on protecting critical ecosystems in tropical Latin America and the Caribbean, Africa,

Madagascar and Asia. He is an author, photographer, and active public speaker. In addition to his volunteer posts with the ISTS (President, 2004) and MTSG, Rod presently oversees the Sea Turtle Flagship Program for CI's Center for Applied Biodiversity Science, and heads CI-Sojourns, a VIP travel program that arranges field-based natural history experiences for CI donors and friends.

Challenges for the MTSG hinge on several key issues related to combating the main hazards to sea turtles globally (incidental take by fisheries; direct take of turtles for food and commercial products; coastal development; pathogens and pollution; and the insidious spectre of global warming).

Long-lived and late to mature, low reproductive success and a host of other biological limitations put marine turtles particularly at risk. How many turtles can be taken and still leave a population in good shape? What age class turtles would be better exploited? Are population decreases reflective of direct take pressure? If so, to what extent? How does all of this bode with communities that have depended on turtles for many generations? These and other biological, historical, practical, cultural, spiritual and moral issues all confound a realistic approach to sustainability with regard to marine turtles. Controlling coastal development, pollution and above all global warming will require broad-scale communication and effective partnerships with governments and business.

The MTSG is confronted with a formidable task to fit all of this into IUCN's 'one programme' theme, and it is approaching this through a series of innovative activities. Through an annual "Burning Issues Assessment" now in its third year, the Group has managed to prioritize populations at risk based on expert opinion and an Internet-based group consensus exercise. The Group also co-hosted the first ever multi-species bycatch workshop and invited the SSC bird, shark and cetacean Specialist Groups to help formulate a multi-species, ecosystem-level approach to bycatch mitigation. The MTSG is now spearheading a bycatch mitigation model that will be of immeasurable use to fisheries managers worldwide, and obviously of benefit to a suite of endangered fauna.

The State of the World's Sea Turtles (SWoT) initiative is a unique collaboration among Duke University, CI, the International Sea Turtle Society, MTSG, and more than 100 field based researchers and data contributors – the ever growing "SWoT Team". United under a common vision, these scattered experts represent projects all over the world that are for the first time pooling their data on a global scale to improve marine conservation planning and outreach to the public and decision-makers using sea turtles as flagships. The Group is in the final editing phase of the first SWoT Report.

The MTSG continues to forge strong partnerships with like-minded institutions and to create broad and effective networks among individuals across the globe whose interest and expertise can be effectively leveraged for the conservation of sea turtles and their habitats.

Mediterranean Island Plants **Bertrand de Montmollin**



Bertrand de Montmollin has worked for over 25 years in nature conservation, on both a professional and voluntary basis. His work includes environmental impact assessments, conservation site management, and monitoring the effects of conservation measures on species and habitats. He works throughout central and southern Europe, the Mediterranean basin as well as the Sahel in Africa.

“Leading a Specialist Group is a difficult challenge to undertake. It involves motivating and supporting the membership – all volunteers – to create a synergy to our actions to ensure that they succeed,” says Bertrand.

The main objectives of the Group over the current intersessional period are:

- To continue the implementation of the conservation measures for the threatened species featured in the recently-published *Top 50 Mediterranean Island Plants*;
- To continue the preparation and publication of fact sheets on the threatened plants of the Mediterranean islands;
- To participate in the identification and conservation of Important Plant Areas;
- To continue the Red List assessments of Mediterranean island plants;
- To increase awareness amongst decision-makers of the importance of plant conservation;
- To anticipate the major threats to plant conservation during the coming decade (urbanization, tourism, climate change, invasive species etc.);
- To promote the inclusion of threatened plants in national and international legislation;
- To promote the sustainable use of resources in natural habitats;
- To promote development and planning practices that are sensitive to natural habitats and landscapes, and to contain the intensive urbanization of the coast for tourist and speculative purposes;
- To improve the sharing of skills and experiences within the Group;
- To improve coordination with other SSC Specialist Groups and other IUCN Commissions and Programmes.

Odonata (dragonflies and damselflies) **Viola Clausnitzer**



For Viola Clausnitzer’s master’s thesis and post-doctoral studies, she researched East African dragonflies – her PhD was on the ecology and biogeography of afroalpine rodents. Viola became Chair of the Odonata Specialist Group (OSG), which consists currently of 25 members, in 2003.

Leading a Specialist Group is a difficult challenge to undertake. It involves motivating and supporting the membership—all volunteers—to create a synergy to our actions to ensure that they succeed

The first big project for the Group was the compilation of regional reports on the status and threats of dragonflies. This resulted in the publication of the *Guardians of the watershed. Global status of dragonflies: critical species, threat and conservation* in a special issue of the *International Journal of Odonatology*. With this report as a basis, the Group has assessed and re-assessed all dragonflies according to IUCN Red List criteria. Currently 375 species assessments have been submitted to the Red List Programme.

Currently dragonflies are also being included, coordinated by OSG member Vincent Kalkman, in the IUCN Sampled Red List Index (SRLI) and in a global assessment of animal diversity organised by the Royal Belgian Institute of Natural Sciences.

The next major goal is a global dragonfly assessment, for which Odonata prove to be a perfect example, since the knowledge on taxonomy, biogeography and ecology for the entire group is outstanding. Dr Sacha Spector (American Museum of Natural History) and Dr Piotr Naskrecki (Conservation International) discussed the potential structure of such an assessment with the scientific odonatologist community during the latest symposium of the Worldwide Dragonfly Association. Both are currently seeking funding for this initiative.

Palm

Scott Zona

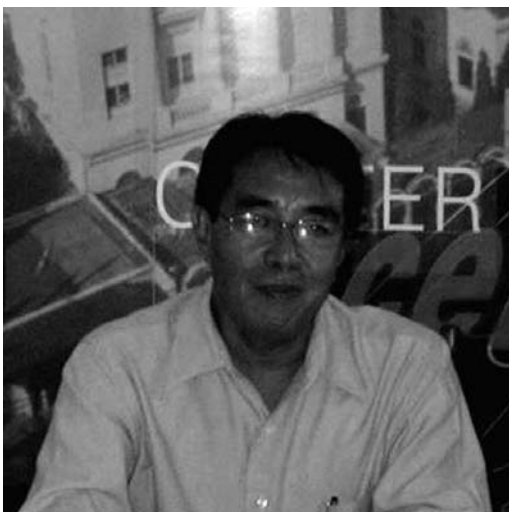


Dr Scott Zona received his BSc in Plant Science (Horticulture) from the University of Florida, his MSc in Botany from the University of Florida, and his PhD in Botany from Rancho Santa Ana Botanic Garden and Claremont Graduate University, in California. He is currently the Palm Biologist for Fairchild Tropical Botanic Garden (FTBG), a position he has held since 1993, and leader of the Palm Conservation Program at FTBG's Center for Tropical Plant Conservation. His training is in taxonomy, systematics and anatomy, and his interests are in all aspects of palm diversity especially the identification, classification and distribution of palms.

Scott's plans for the Palm Specialist Group (PSG) include establishing a website that will act as a "clearing house" for palm conservation, offering tools, contact information and current conservation news. The Group will focus on the Global Palm Assessment, an ambitious project in which all of the world's approximately 2,600 palm

Philippine Plant

Domingo A. Madulid



Domingo A. Madulid received his MSc in pure and applied plant taxonomy from the University of Reading, UK, where he went on to complete a PhD in botany in 1980. Currently, Domingo is Scientist and Chief of the Botany Division of the Philippine National Museum in Manila.

Under his leadership, the Philippine Plant Specialist Group helped to develop a strategy and action plan for plant conservation in the Philippines with the Department of Environment and Natural Resources. The Group has also undertaken field surveys of threatened plants and assessment of conservation status of certain species. A database of threatened Philippine plants is under development.

In the next few years, the Group hopes to increase its membership with representation from all biodiversity regions of the country.

"We will aim to hold consultative meetings among members of particular plant sub-groups (orchids, palms, gymnosperms, dipterocarps, legumes, ferns and so on) as we continue the assessment of Philippine plants to include in the IUCN Red List," says Domingo.

The Group will publish a Red Data Book on Threatened Plants of the Philippines and contribute to the National List of Threatened Plants of the Philippines through the Philippine Plant Conservation Committee and promoted by the Department of Environment and Natural Resources. The Group intends to hold training workshops and continue with the production of an electronic database of threatened Philippine plants.

The Group will focus on the Global Palm Assessment, an ambitious project in which all of the world's approximately 2,600 palm species will be assessed according to the IUCN Red List Categories and Criteria

species will be assessed according to the IUCN Red List Categories and Criteria and point data from herbarium specimens. To that end, Scott is leading the PSG's efforts to get specimen data digitized from a dozen herbaria around the world that have significant palm collections. The Global Palm Assessment will lead to new Red List assessments for the palms.

Scott is also co-editor of *PALMS*, the journal of the International Palm Society, and a member of the Society's board. His interest in palms and tropical plants is more than just professional. He is an avid gardener with a work in progress in South Miami, Florida.

Polar Bear **Andrew Derocher**



Bears have fascinated Andrew Derocher from an early age and good luck has allowed him the opportunity to study this amazing group of animals for over 22 years. He has researched polar bears in Canada and Norway with studies on population ecology, population dynamics, ecotoxicology, and behaviour. His current position as Professor of Biological Sciences at the University of Alberta allows him the opportunity to introduce students to the world of the “ice bear”.

“Polar bears have the rare good fortune to still occupy the vast majority of their natural range; for the largest of the carnivores, this is a record of some note,” says Andrew.

“Living on the sea ice where interactions with humans are limited, polar bears were threatened by over-harvest but good management practices have largely eliminated this threat. However, the world of the polar bear is rapidly changing. Threats from pollutants have impacted some populations but of far greater concern is the rapid loss of their primary habitat: the Arctic sea ice. Changes in populations have already been noted in the Beaufort Sea of Alaska and Canada and the populations in Hudson Bay are showing declines in population size and/or condition.”

Polar bears have the rare good fortune to still occupy the vast majority of their natural range

Polar bears are a flagship species for the Arctic and the impacts of climate warming. A challenge for the Polar Bear Specialist Group is to provide concrete information on how polar bears are being affected by global warming. As Chair of the Group, Andrew hopes to develop a framework for adaptive management of polar bear populations under changing environment conditions. Safety of human populations living in the range of polar bears will become an increasing concern as the bears become nutritionally stressed and their distributions altered by changing sea ice patterns. Integration of local ecological knowledge and co-management are priorities in all jurisdictions. Developing adequate and appropriate responses to global warming will be a challenge. Unlike many species at lower latitudes, polar bears do not have the option of migrating further north.

Shark **Sarah Fowler**



Sarah Fowler has worked in marine conservation for over 25 years and has been deputy, acting or co-chair of the Shark Specialist Group (SSG) since its inception in 1991. A new co-chair from a developing region is currently being sought to form the other half of the SSG leadership.

“The quadrennium started on a sad note, with Executive Officer Rachel Cavanagh leaving after over four years in the post. The long-overdue *Shark Status Report*, published in 2005, forms only part of Rachel’s huge legacy. We now have a new team in the SSG office: Claudine Gibson as Programme Officer and Sarah Valenti as Red List Officer. They will continue the ambitious programme of working with the SSG network of taxonomists, researchers and fisheries scientists to complete Red List assessments for all chondrichthyan fishes in 2007,” says Sarah.

“We are more than half way through this task, but regional workshops are still to be held in the Northeast Atlantic, West Africa, Indian Ocean and Northwest Pacific. In addition to completing species assessments, these workshops play an important role in increasing regional capacity and widening SSG membership globally. Red List assessments for our entire taxonomic group will contribute significantly to the Global Marine Species Assessment and provide a very important source of scientific information on which to base national, regional and international conservation and management priorities, decisions and policies affecting shark biodiversity.”

Other major areas of SSG activity include the provision of technical support to CITES and its Parties, and to UN Food and Agriculture Organization members seeking to implement the FAO International Plan of Action for the Conservation and Management of Sharks. International trade demand for shark products is implicated in driving unsustainable fisheries for many species, but trade controls cannot deliver sustainable fisheries. The promotion through the SSG of improved shark fisheries monitoring and management capacity is essential to deliver the Group’s mission: to promote the sustainable use, wise management and conservation of all chondrichthyan fishes including the promotion of sustainable shark fisheries management.

South American Camelid Hernán Torres



Hernán Torres has participated in the SSC South American Camelid Specialist Group since 1978. He obtained a BSc in Natural Resources at the University of Michigan and a Master of Environmental Studies at Yale University. He has published several works on South American camelids and successfully headed the efforts to recover the vicuña (*Vicugna vicugna*) populations in the Chilean Andes.

Hernán outlines the Specialist Group's activities in relation to SSC's three objectives.

Decisions and policies affecting biodiversity, influenced by sound interdisciplinary scientific information

Although vicuña and guanaco (*Lama guanicoe*) populations are in their majority, far from extinction, it is still necessary to guarantee the survival of marginal populations located on the borders of their distribution range and outside protected areas. On the other hand, the populations that have successfully recovered are currently the object of management practices that require a community understanding of the importance of the animal's welfare as a management tool.

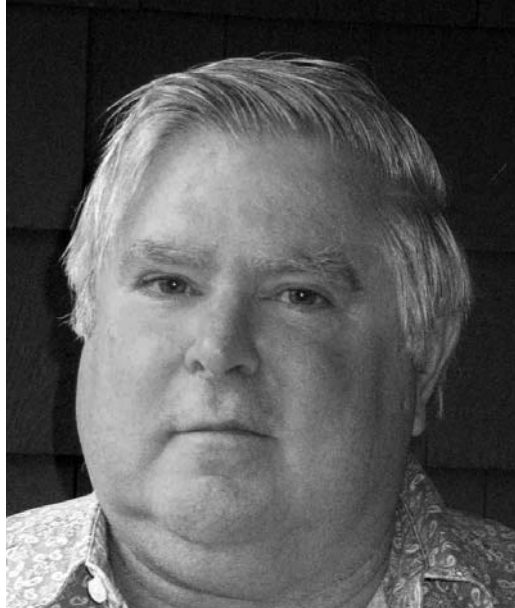
Modes of production and consumption that promote the conservation of biodiversity adopted by users of natural resources

The Group has provided technical advice to authorities in Chile and Argentina in the application of sustainable management techniques on vicuñas and guanacos. The capture, shearing and liberation of animals is the management technique accepted by CITES to obtain and trade only wool from both species.

Capacity increased to provide timely, innovative and practical solutions to conservation problems

The timely advice to national and local authorities on important conservation issues dealing with South American camelids will continue to be one of the main tasks for the Group during the coming years. Another priority will be the communication of the results achieved and for that purpose the Group has revitalized its electronic newsletter in both Spanish and English.

Storks, Ibises and Spoonbills Malcolm Coulter



Malcolm Coulter earned an MSc in 1973 from Oxford University and a PhD in 1977 from the University of Pennsylvania. He carried out early research on the Farallon Islands, California, on western gulls, storm petrels, and other birds as well as on the plants (population studies and control of invasives). Malcolm moved to the Darwin Research Center, Galapagos, Ecuador, where he established a long-term conservation effort for the dark-rumped petrel. As Resident Ornithologist, he studied blue-footed boobies, flamingos, flightless cormorants and Galapagos penguins. Malcolm continues his involvement on the Farallon Islands and in the Galapagos.

In 1984, he was invited to direct the American Wood Stork program at the University of Georgia's Savannah River Ecology Laboratory. He directed this program for 10 years and became increasingly involved with the international conservation of storks, ibises and spoonbills.

In 1989, he assumed co-chair of the SSC Storks, Ibises and Spoonbills Specialist Group and has concentrated his efforts on international conservation of these birds, working throughout the world but concentrating efforts in Asia. Species of great concern include the black-faced spoonbill, oriental white stork and oriental crested ibis.

Malcolm is an elective member of the American Ornithologists' Union and has received awards from the Pacific Seabird Group, SAVE International, Waterbird Conservation for the Americas, and the Waterbird Society.

The Group has provided technical advice to authorities in Chile and Argentina in the application of sustainable management techniques on vicuñas and guanacos

Sturgeon

Mohammad Pourkazemi



Mohammad Pourkazemi, an Iranian national has a BSc in Fisheries and Environment from the University of Natural Resources, Gorgan, Iran and a MSc in Aquaculture from the University of Godollo, Hungary. In 1996 he submitted his thesis on “Molecular and Biochemical Genetic Analysis of sturgeon stocks from the south Caspian Sea” for a PhD in the molecular genetics and biochemistry of sturgeons at the University of Wales, UK.

Mohammad is a member of various scientific committees in the Iranian Fisheries Organization including Aquatic Genetics Research and Race Improvement, Rehabilitation and Aquatic Biotechnology. He has participated in various national and international conferences and symposia.

Since 1997 Mohammad has been the CITES Scientific Authority for sturgeons in Iran and since 2001 the Representative of Asia on the CITES Animals Committee. He was appointed Chair of the IUCN Sturgeon Specialist Group (SSG) in 1999.

The SSG now has more than 50 members from 14 countries, particularly sturgeon range states. Its aim is to promote restoration of sturgeon species

Priorities for sturgeon conservation include combating illegal harvest and illegal trade

in the wild and in their natural habitats through development and implementation of appropriate conservation action (including sustainable use). Priorities for sturgeon conservation include combating illegal harvest

and illegal trade, enhancing natural reproduction, stock assessment, improving restocking and aquaculture, and improving international co-operation, agreement and management.

The SSG works closely with international organizations particularly CITES on management issues and trade of surgeon stocks and to develop genetic markers for sturgeon species identification. It has also collaborated on the Significant Trade Review of several sturgeon species.

Among the Group’s varied tasks are the assessment of North American sturgeon species for the Red List, completion of the Red List for Eurasian sturgeon species, and commenting on a proposal by the US Fish and Wildlife Service to list beluga sturgeon (*Huso huso*) under the US Endangered Species Act.

The Group supported WWF in developing an Action Plan for the conservation of sturgeons in the Danube River in 2005 and is working on developing an Action Plan for sturgeons in the Caspian Sea.

“This can be achieved by introducing new methodology on stock assessment and by sharing experiences related to the conservation and sustainable use of shared stocks, as well as by encouraging public involvement in the management and conservation of sturgeon stocks,” says Mohammad.

Sustainable Use

Jon Hutton



Dr Jon Hutton is widely recognized as an authority on, and enthusiastic participant in, many aspects of international wildlife conservation policy, including CITES and wildlife trade, protected area management, community-based conservation and the sustainable use of natural resources.

In 2001 Jon facilitated a partnership agreement between two Cambridge-based organisations, Fauna & Flora International (FFI) and ResourceAfrica (UK). As a result of this partnership, he held the post of Regional Director for Africa within FFI while continuing as the Executive Director, ResourceAfrica (UK). Since November 2005 Jon has been Director of the UNEP World Conservation Monitoring Centre.

Since receiving his doctorate on the population ecology of the Nile crocodile, Jon has held four senior management positions in both the UK and Africa encompassing the government, NGO and private sectors. He has wide professional experience, ranging from the management of zoological collections through field research and management wildlife to policy research and formulation, institution-building and programme management.

During the 1980s, Jon was Senior Ecologist in Zimbabwe’s wildlife department where he was a key member of Zimbabwe’s national delegation to international Multilateral Environmental Agreements, including CITES and the CBD. He represented southern interests on a range of technical panels and committees, including two terms as African representative on the CITES Animals Committee. He has undertaken a number of consultancies for the CITES Secretariat including the Nile Crocodile Project in eight countries of East and southern Africa and an analysis of the Significant Trade Review process.

Jon's principal interests today lie in the sustainable use of natural resources where he is involved at all levels from policy and legislation to field research and project management. He is a member of the SSC Steering Committee.

At the University of Cambridge Jon is researching issues of international policy and regulation which directly affect development and conservation processes in Africa – especially those which impact upon community-based natural resource management. His work includes an examination of interactions between CITES, the World Trade Organization and unilateral measures taken by economically-powerful Northern countries in the name of environmental protection.

Jon is author of over 50 papers and book chapters on wildlife management and development issues. His most recent book, *Endangered Species, Threatened Convention: The Past, Present and Future of CITES*, presents a 'Southern' view of this Convention. He is currently a Member of the Executive Committee of the IUCN in the UK, a founder member of the Cambridge Conservation Forum, Vice Chair of the SSC Crocodile Specialist Group, a member of the New York Academy of Sciences and a fellow of the Southern African Institute of Ecologists and Environmental Scientists.

Tapir

Patrícia Medici



Patrícia Medici is a Brazilian conservation biologist whose main professional interests are tapir conservation, Atlantic Rainforest conservation, metapopulation management, landscape ecology, and community-based conservation. Patrícia has a Bachelor's Degree in Forestry Sciences from São Paulo University, and a Master's degree in Wildlife Ecology, Conservation and Management from the University of Minas Gerais, Brazil. Patrícia has been recently accepted for the PhD Program at the Durrell Institute of Conservation and Ecology (DICE) at the University of Kent, UK.

For the past 15 years, Patrícia has been working for IPÊ – Instituto de Pesquisas Ecológicas (Institute for Ecological Research), a non governmental organization of which she was one of the founding members. Since 1996, she has coordinated a long-term conservation project on lowland tapirs, which investigates their potential as "landscape detectives" for the conservation of the Atlantic Forests of Brazil.

Patrícia has been chair of the Tapir Specialist Group for the past six years, and has been recently nominated as Convener of the SSC Conservation Breeding Specialist Group – Brazilian Network. In September 2004, Patrícia was awarded the Harry Messel Conservation Leadership Award by IUCN in recognition of her contributions to tapir conservation worldwide and to IUCN in particular.

The major challenge for the Tapir Specialist Group during the current intersessional period will be the finalization and implementation of the second edition of the Tapir Action Plan. After three workshops focusing on three tapir species over the three last years, 75% of the new action plan has been completed. A fourth workshop on the Lowland Tapir will be held in Brazil in early 2007. The Group is currently establishing a Task Force to monitor the implementation of the new plans, ensuring that all the recommended actions are put into practice.

Wolf

L. David Mech



IUCN's Survival Service Commission, the predecessor to the Species Survival Commission, founded the Wolf Specialist Group in 1970, with Dr. Douglas Pimlott of Canada as its chair. L. David Mech succeeded Pimlott in 1978 and has held the post since. His career since entering graduate school in 1958 has focused on wolf research and conservation, and techniques for facilitating both, mostly through his employment with the US Department of the Interior and as an adjunct professor at the University of Minnesota.

"The Wolf Specialist Group functions primarily by informal and formal collaboration among its members. Wolves are circumpolar, so our members represent several countries," says David.

"We usually meet at least once every five years, exchange information about wolf conservation problems peculiar to each area, publish status and conservation information about wolves in each area via the Canid Action Plan, and send resolutions promoting conservation actions to member countries as needed. The Group also supports and cooperates with wolf conservation efforts of its members, such as the establishment of the International Wolf Center, and attempts to coordinate wolf conservation among various countries through Europe's Large Carnivore Initiative.

**Large Carnivore Initiative for Europe
Working Group**

Luigi Boitani



Luigi Boitani is a Professor of animal ecology and conservation biology at the University of Rome and Chair of the Department of Animal and Human Biology. He has been working on wolf ecology and conservation since 1973, and more recently has expanded his research interests to include several other carnivore species in Italy and abroad.

The Large Carnivore Initiative for Europe (LCIE) was launched in 1995 by WWF International to provide a continent-wide vision and approach to the conservation of large carnivores in Europe (brown bear, Eurasian lynx, Iberian lynx, wolf and wolverine). It was an independent group of experts until 2004 when it became a SSC Working Group. The Group comprises a core group of 21 experts and a wider network of more than 350 experts throughout all European countries. The LCIE is formally recognized as the Group of Experts on Large Carnivores to the Bern Convention and the Action Plans produced by LCIE on the five carnivore species were adopted by the Bern Convention in 2000. The studies and statements produced by LCIE are available at www.lcie.org.

The LCIE's mission is "to maintain and restore, in co-existence with people, viable populations of large carnivores as an integral part of ecosystems and landscapes across Europe".

"The increasingly unified legal and planning requirements within Europe create new and promising opportunities for the successful management of large carnivore populations on a

The increasingly unified legal and planning requirements within Europe create new and promising opportunities for the successful management of large carnivore populations on a Europe-wide scale

Europe-wide scale. The LCIE is involved in four important fields of activity – conservation of large carnivore populations and their habitats; integration of large carnivore conservation into local development in rural areas; support for large carnivores through appropriate legislation, policies and economic instruments; and information and public awareness with the aim of obtaining the acceptance of large carnivores by all sectors of society," says Luigi.



News Round-up

Experts Develop Global Action Plan to Save Amphibians from Extinction

In September a summit of leading scientists agreed to an action plan intended to save hundreds of frogs, salamanders and other amphibians facing extinction from familiar threats such as pollution and habitat destruction, as well as a little-known fungus that is wiping out their populations. The Amphibian Conservation Summit held in Washington DC, called for a series of actions, including emergency responses to save species under the greatest threat. More than 60 specialists, convened by SSC, drafted the seven-page Amphibian Conservation Action Plan.

Full story:

www.iucn.org/en/news/archive/2005/09/amphibians.pdf

Amphibian Conservation Action Plan declaration: www.iucn.org/webfiles/doc/SSC/SSCwebsite/GAA/ACAP_Summit_Declaration.pdf



Ambystoma opacum

Substantial Increases in Major Southern and Eastern Africa Savannah Elephant Populations

The number of savannah elephants in major populations in Eastern and Southern Africa has increased substantially in recent years, according to a study published by SSC's African Elephant Specialist Group (AfESG). In the first objective statistical analysis of changes in elephant populations ever conducted at this scale, researchers selected and analyzed elephant population estimates from sites where surveys were repeated using comparable methods between the late 1990s and 2002. The estimated number of elephants in Southern and Eastern Africa sites increased from around 283,000 to nearly 355,000, which translates to an estimated overall rate of increase of around 4.5% per year.

Full story:

www.iucn.org/themes/ssc/news/article/iucn_elephant_population_increase.pdf

Global Marine Species Assessment Underway

The Global Marine Species Assessment (GMSA) carried out as part of SSC's wider Biodiversity Assessment Initiative is underway. The GMSA will be the first global review of the conservation status of every marine vertebrate species and of selected invertebrates and plants. Led by SSC, the project will involve a range of partners in compiling and analyzing all existing data on around 20,000 species, and determine the risk of extinction according to the IUCN Red List Categories and Criteria. Kent Carpenter has been appointed as project coordinator, based at Old Dominion University, Virginia, USA.

Pulling Together for a Continental Strategy for the Conservation and Management of the African Lion

The conservation status of the African lion, for many, the very symbol of the continent's wildlife, is giving cause for serious concern. It was classified as Vulnerable on the IUCN Red List of Threatened Species in 2004 due to a continuing decline in population, with current numbers estimated at 23,000–39,000. In West Africa, lions number fewer than 1,500 and meet the criteria for regionally Endangered.

SSC's Cat Specialist Group worked with IUCN Regional Offices and a number of partners, including the Wildlife Conservation Society, to bring together biologists, Range State government managers, and other stakeholders in a series of regional lion conservation workshops. The first of these was held in Douala, Cameroon in October. Participants focused on the current distribution and status of lion populations in the two sub-regions. They developed a new, updated lion range map, and identified priority populations for conservation ("Lion Conservation Units," or LCUs). These LCUs were assessed for threats, and participants identified uncontrolled hunting of the lion's wild prey base as the major one in 75% of the 20 LCUs. This clearly shows that maintaining the abundance of large ungulate populations is a key component of lion conservation.

A group of high level representatives from most range state governments developed regional conservation strategies. They set themselves the goal of "ensuring the conservation and sustainable management of the lion in West and Central Africa". A number of actions were recommended to achieve the objectives in each sub-region including measures to reduce lion-human con-

Maintaining the abundance of large ungulate populations is a key component of lion conservation



flict, control trade in bushmeat, build government capacity to manage lion populations, and conserve lion habitat.

IUCN played its strongest hand - convening, facilitating and technically supporting governments and scientists, IUCN members and Commission members, to come to meaningful solutions for a species-related issue that symbolizes the challenges of balancing conservation and development in 21st century Africa.

The West and Central African Lion Conservation Strategies will be published in January 2006. Meeting documents are available on the web at www.felidae.org/DOUALA/lion.htm.

The East and Southern Africa Lion Conservation Workshop took place in Johannesburg on 8–13 January 2006 and will lead to an overall continental strategy for African lion conservation.

SSC Undertakes First Ever IUCN Red List of European Threatened Mammals

SSC is conducting the first specific assessment of Europe's approximately 281 mammal species. They include a high number of threatened endemic species, amongst them the most endangered big cat in the world - the Iberian lynx.

Only around 250 individuals remain - habitat fragmentation has reduced their numbers to a critical level. The European Mammals Assessment will be conducted by SSC experts, and is funded by the European Union. The IUCN Regional Office for Europe and SSC, together with IUCN Species Programme staff will jointly undertake the assessment in the framework of the pan-European initiative "Countdown 2010—Halt the loss of biodiversity".



Iberian lynx (Lynx pardinus)

SSC Perspective on Avian Influenza

The spread of avian influenza points to the urgent need to tackle the underlying causes of all shared animal-human diseases, rather than reacting exclusively to the current epidemic, says SSC's Veterinary Specialist Group (VSG). "Much is being done to control the spread of bird flu, but far too little attention is given to the underlying

causes of this outbreak. Our modern world is increasing the risk that animal diseases jump over to humanity, and it is only a matter of time before we are hit by the next epidemic if we do not address those issues," says

Dr. William Karesh, co-Chair of the VSG and Director of the Wildlife Conservation Society's Field Veterinary Program.

Full IUCN brief:

www.iucn.org/en/news/archive/2005/11/avian_influenza.pdf

Wildlife Conference Gives Conservation Boost to West Africa's "Forgotten" Elephants

An agreement aimed at boosting the fortunes of Africa's 'forgotten' elephants emerged from the Convention on Migratory Species (CMS) meeting in November. Twelve countries in West Africa, home to the region's last remaining populations of elephants signed the treaty which together with its associated Strategy or action plan, sets targets and timetables for improving elephant habitats, boosting the numbers of fragile populations, the setting up of wildlife 'corridors' and a range of other measures covering cross-border cooperation.

Full story:

www.iucn.org/en/news/archive/2005/11/cms_elephants.pdf

Escaping the Cats' Clutches Gives the Anegada Iguana a Good Headstart

A grant from the SSC Sir Peter Scott Fund for Conservation Action is helping to continue the early conservation successes in the fight to save the Anegada iguana, listed as Critically Endangered on the IUCN Red List of Threatened Species. This impressive one metre-long vegetarian has suffered an 80% population crash since the late 1960s because of extensive habitat degradation from free-ranging cattle and goats, coupled with feral cat predation. Now fewer than 300 lizards remain. Formerly distributed throughout the Puerto Rican island chain, the last remaining population is only found on the tiny island of Anegada in the British Virgin Islands, and the iguana may have disappeared completely if positive action, instigated by the SSC Iguana Specialist Group, had not been taken.

Full story:

www.iucn.org/themes/ssc/news/SirPeterScottAnegada.htm

Much is being done to control the spread of bird flu, but far too little attention is given to the underlying causes of this outbreak

Slow but Steady – Giant Tortoises Help Clear Invading Species from Island Paradise

On the beautiful Mauritian island of Ile aux Aigrettes, some unlikely conservation assistance is being provided by giant tortoises which are happily dining on invasive weeds that are threatening the island's natural balance. Ile aux Aigrettes, a 26ha offshore islet, harbours Mauritius's last remnant of coastal ebony forest but is under constant threat of degradation from invasive plant species. A restoration project to remove invasive alien species and re-establish native ones began in 1985. Now 80% of the island's forests has been restored. A grant from SSC's Sir Peter Scott Fund for Conservation Action is helping complete the restoration work, safeguarding this unique habitat and its associated threatened wildlife.

Full story:

www.iucn.org/themes/ssc/news/ile_aux_aigrettes.htm

SSC Specialists Identify Global Priorities for Reducing Cetacean Bycatch

Eleven of the world's leading marine scientists, all members of SSC's Cetacean Specialist Group, have, for the first time, assessed dolphin and porpoise populations around the world which are severely threatened by entanglement in fishing gear. They recommend nine urgent priorities for action in a report commissioned by WWF. These nine projects highlight species threatened by bycatch that are the most likely to benefit from immediate action but are languishing without intervention. The list of dolphins and porpoises that could recover if changes to fishing methods and other conservation efforts are made includes harbor porpoises in the Black Sea, where thousands of porpoises are killed each year; Atlantic humpback dolphins off the coast of west Africa; and franciscana dolphins in South America. Most of the species on the list are threatened by the widespread use of gillnets. These nets are difficult for dolphins and porpoises to spot visually or detect with their sonar, so they may become tangled in the netting or in the ropes attached to the nets.

Full report:

www.iucn.org/webfiles/doc/SSC/SSCwebsite/News/Top_Nine_report_EN.pdf

SSC Mourns Two of its Champions

David Given

IUCN, SSC and the international plant conservation community have lost one of their champions, David Given. He died peacefully on 27 November, surrounded by his family, after losing a two-year battle against cancer.

David's passing is a huge loss to both New Zealand plant conservation and to the wider environmental community. He served on the SSC Steering Committee and Chaired the Plant Conservation Committee (PCC) from 1997 to 2004. A world expert on ferns, he was also Chair of the Pteridiophyte Specialist Group until devoting more time to the PCC.

David's passing is a huge loss to both New Zealand plant conservation and to the wider environmental community

David contributed to other Specialist Groups including Re-introduction, Conservation Breeding and Sustainable Use, as well as making important contributions to the IUCN World Commission on Protected Areas and World Heritage issues. A man of strong faith, he put his religious convictions to work into improving the world around us.

The full tribute to David is available at:
www.iucn.org/en/news/archive/2005/11/david_given.pdf

Richard Fitter

One of Britain's most influential naturalists and conservationists, and author of many field guides to animals and plants, Richard Sidney Richmond Fitter, died on 3 September.

It would be his international conservation work for which Richard would wish to be remembered, especially with the Species Survival Commission in the 1960s and 1970s. Under Sir Peter Scott's chairmanship, the SSC grew and the first Red Data book unit was formed; this was all carefully steered by Fitter in his capacity as Chairman of the SSC Steering Committee. With his death the last surviving link with the founding fathers of IUPN (as IUCN was known then) has been lost.

Richard latterly spent much time organizing his incomparable collections of agenda papers and other archives. His most influential contribution to British natural history was perhaps his field guides. Two of the plant field guides he wrote for Collins have become classics: *The Pocket Guide to Wild Flowers* (1956, with David McClintock) and *Wild Flowers of Britain and Northern Europe* (1974, with his son Alistair and artist Marjorie Blamey). *Wild Flowers of Britain and Ireland* (2003, with the same team) looks set to become another such classic work.

Courtesy of Plant Talk



Feature:

SSC – Demonstrating the Relevance of Wildlife Conservation to Human-Wellbeing and Livelihoods

ACROSS THE BROAD SPECTRUM of its work, the Species Survival Commission is demonstrating the vital links between biodiversity conservation and human health and livelihoods. Together with partners, it must use the accumulated evidence to convince governments that the welfare of their people depends on the sound conservation of species, habitats the ecosystem services which support so many livelihoods.

Whether working to secure sustainable harvest levels of species such as medicinal plants, marine and freshwater fish, or crocodiles, that are important in either subsistence or economic terms, SSC members are helping to turn the tide of awareness of the importance of biodiversity.

In this feature we focus on the work of two Specialist Groups whose work is particularly topical – the Veterinary Specialist Group and its work on shared human-wildlife diseases, and the African Elephant Specialist Group on its efforts to reduce human-elephant conflict. We also profile the work of one Medicinal Plant Specialist Group member.

Devising creative approaches to protect the health of people, animals and ecosystems

Humanity has become vulnerable to cross-species illnesses, due to modern advances such as rapid transportation of goods and people, increasing population density and a growing dependence upon intensive livestock production for food.

Habitat fragmentation and degradation, and human encroachment into formerly isolated areas, has also helped to increase the spread of infectious diseases. The potential impact strikes both ways; humans and domestic animals are at risk from wild populations and vice-versa. Without adequate scientific knowledge and planning, the consequences can be detrimental to one or both.

In response to this, the IUCN Veterinary Specialist Group (VSG) teamed up with other representatives from the conservation community, agriculture, industry and universities for a ground-breaking symposium “Beyond Zoonoses: One World – One Health” in Beijing in November

(zoonoses are diseases that pass between animals and people). The workshop provided an unprecedented opportunity to reach across borders to bring scientists and policy makers together. Delegates focused on identifying links between animal health, human health, conservation and policy.

Developing creative approaches to protect the health of people, animals and ecosystems was the main priority for the delegates attending this third meeting in the “One World – One Health” workshop series. To build on the success of previous gatherings, the VSG worked with other experts in the arena of wildlife, domestic animal and human health to discuss current issues in the field, particularly those pertinent to Asia, such as SARS and Avian Influenza. More details can be found at www.oneworldonehealth.org.

One of the human-wildlife diseases currently of greatest global concern is the H5N1 avian ‘flu outbreak, and VSG scientists are playing a key role in the research and management of this disease.

Samples collected from wild migratory birds by VSG scientists in response to an outbreak of avian ‘flu in Kovsgal Province, Mongolia contained the deadly H5N1 strain of avian ‘flu, changing the

global understanding of how the disease moves. Additional testing has shown that the samples recovered by the VSG team hold a unique and important genetic strain of the virus — a strain that will be used by the World Health Organization and others to develop a vaccine for humans against this potentially devastating disease.

In November 2005, several Vietnamese cities began poisoning pigeons and other wild birds in an attempt to curb the spread of the H5N1 bird flu virus. Many VSG members responded through a letter to the government of Vietnam opposing the plan. The Food and Agriculture Organization of the United Nations immediately issued a press release quoting VSG member Dr Juan Lubroth (FAO senior officer responsible for infectious animal diseases) as saying: "This is unlikely to make any significant contribution to the protection of humans against avian influenza." He added: "There are other, much more important measures to be considered that deserve priority attention. Fighting the disease in poultry must remain the main focus of attention." In early December 2005, the Vietnamese government ordered all cities to halt the culls.

Another zoonotic disease of major concern is the deadly Ebola virus in central Africa. Eleven human cases, including nine deaths have been reported since the start of the latest outbreak in the north-west of the Democratic Republic of Congo in April 2005.

VSG members are closely involved in the research into the Ebola virus and its interactions with wildlife, and this has already resulted in some key findings that can help local people reduce the risk of infection. VSG member Dr Eric Leroy and his colleagues at the Institut de la Recherche discovered that three species of fruit bats may have played a role in the ecology of Ebola during the outbreaks. The team strongly recommends that villagers in these areas are made aware of the risks involved in hunting and eating these bats.

VSG members are closely involved in the research into the Ebola virus and its interactions with wildlife, and this has already resulted in some key findings that can help local people reduce the risk of infection

Wildlife mortalities are common during Ebola outbreaks and should act as a warning for local people, as they are considered by scientists to often precede human cases. The latest outbreak appears to have started after hunters came into contact with dead or dying wildlife.

As well as being a human health issue Ebola also poses a serious threat to the survival of gorillas and chimpanzees throughout the Congo Basin, already under enormous pressure because of hunting and habitat loss. A greater understanding



VSG scientists collect biological samples from gorillas and other wildlife suspected to have died from Ebola hemorrhagic fever in Lossi Gorilla Sanctuary, the Republic of Congo

of the ecology of the disease will be of great benefit to both human well-being and great ape conservation.

Primates and humans share countless diseases ranging from respiratory illnesses to tuberculosis and a multitude of parasitic infections. VSG member Dr Fabian Leendertz, from Robert Koch Institut in Germany, helped the Cameroon government diagnose anthrax as the cause of recent deaths among gorillas.

Alleviating human-elephant conflict

Human-elephant conflict (HEC) is a complex and growing problem that threatens both the livelihoods of many local communities in Africa and the survival of African elephants.

One of the main forms of HEC is agricultural crop-raiding. Although not the most common crop pest, elephants usually cause much more damage than other species and are much more dangerous than other herbivores, resulting in more human deaths and injuries. For these reasons, elephants are generally less well tolerated than other animals. As approximately 80% of the African elephant's range is outside protected areas, it is vital to find ways to reduce crop losses to improve food security and maintain the tolerance of elephants by rural communities.

Past efforts to mitigate HEC have concentrated almost exclusively on short-term deterrence methods at the conflict site, aimed primarily at preventing elephants from crop raiding. These methods have often been applied in an *ad hoc*, uncoordinated manner, and have in most cases achieved little success at alleviating the problem in the long term.

Local site-level successes have been achieved when a more coordinated approach has been adopted. SSC African Elephant Specialist Group (AfESG) members and collaborators have been involved in two such projects that have resulted in

a dramatic reduction in crop raiding by elephants (down 90%) – one in the Transmara region in Kenya, the other in Ghana’s Red Volta region.

In both cases, increased guarding efforts, resulting in better detection and earlier warning of crop-raiding elephants has led to the much more effective use of deterrents. In the Red Volta region, losses were reduced by modifying farming practices, such as drying millet and maize at the farm rather than in the fields. Encouragingly, the communities have been able to succeed using largely their own resources after initial assistance to set up the initiatives. (Detailed information on the Red Volta project is available on the web at <http://www.iucn.org/afesg/hec/pdfs/hecrvprep.pdf> and the Transmara project is available in the *Journal of Applied Ecology* 2005 pp1175–1182).

However, encouraging as the success of these initiatives is, they are site-specific and may not be applicable elsewhere. More importantly, these interventions deal primarily with the symptoms of the conflict; elephant damage, and not its root causes, such as rural poverty, lack of alternative livelihood opportunities, few benefits from elephants and poor land use planning.

Some of these issues are being considered in the Red Volta region, but the AfESG believes that addressing such underlying causes is not only necessary to reduce the damage caused by HEC in the long term, but also offers great potential for developing strategies that maximize benefits and minimize costs to communities living with elephants.

The Group is currently seeking funds to carry out pilot studies to develop and test

coordinated approaches to HEC mitigation at multiple scales by a broad spectrum of stakeholders. Starting with a few pilot countries, the AfESG aims to implement activities that tackle the numerous technical, institutional, socio-political and economic issues that contribute to HEC. It is envisaged that through the combination of carefully designed, vertically integrated actions by stakeholders (or in other words the input and involvement of everyone concerned, from the conflict site up to national decision-making level), it will be possible to reduce HEC in the long term.

The expected outcome of this approach is a set of “best practices” for overcoming HEC, which will be documented and widely disseminated to the 37 African elephant Range States. It is hoped the lessons learned can be applied to other regions, in particular elephants in Asia, and possibly to other species.

Selecting and promoting the sustainable use of medicinal plants



Warburgia salutaris flowers

Nigel Gericke, a member of SSC’s Medicinal Plant Specialist Group is a medical doctor and botanist who has been documenting medicinal plants use for 20 years. His experience in diverse settings has allowed him to appreciate the role of indigenous healers in rural and township settings. While working as a district medical officer with Innu and Inuit communities in Labrador, Canada, Nigel saw how rapidly medicinal plants use knowledge is lost with the breakdown of traditional cultures, and became determined to document local plant use information in southern Africa.

In 1998 he set up a micro natural medicines company called Phyto Nova with like-minded colleagues, demonstrating that affordable natural medicines of high quality can be made from select indigenous medicinal plants.

Manufactured products were developed for the first time from the plants *Sutherlandia frutescens*, *Warburgia salutaris*, and *Siphonochilus aethiopicus*. Since all the products are made from cultivated plants, an economic incentive was created to encourage the cultivation of these species. With the extreme HIV/AIDS situation in southern Africa, products were primarily developed to help address HIV-related conditions. *Sutherlandia* tablets and tea are used for modifying immunological responses, appetite-stimulation, and to enhance mood; tablets of freeze-dried *Warburgia* leaf are highly effective in treating mouth and throat thrush, for acute cystitis, and for chest infections; *Siphonochilus* is useful for treating fever, headache, and thrush. Preliminary observations suggest *Siphonochilus* is an excellent antimalarial treatment. A simple gel from a water extract of *Sutherlandia* is useful for acute shingles, herpes, and other skin conditions commonly seen in people living with HIV. Phyto Nova has since been acquired by a South African black economic empowerment company, and Nigel continues to support the new owners with medical and scientific input.

Nigel works as a consultant to share these experiences, and to assist local communities select, use, conserve and add value to local medicinal and edible plant resources.

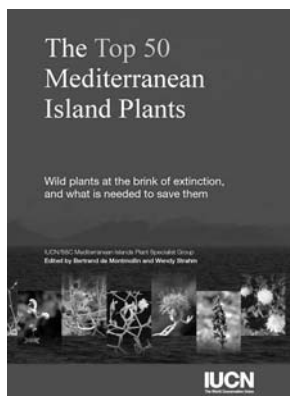
Nigel saw how rapidly medicinal plants use knowledge is lost with the breakdown of traditional cultures, and became determined to document local plant use information in southern Africa

Publications

New Publications

Conservation and Development Interventions at the Wildlife/Livestock Interface: Implications for Wildlife, Livestock and Human Health, published by SSC features some of the most innovative conservation thinking in Africa today and provides concrete examples of the significant role animal health plays in both environmental conservation and economic development. The publication can be ordered from the IUCN bookstore (www.iucn.org/bookstore) and is available on the SSC website at: www.iucn.org/themes/ssc/pubs/AHEAD.htm

Top 50 Mediterranean Island Plants Threatened With Extinction



Majorca, Ibiza, Sicily, Crete, Malta – for many, these islands conjure up images of dream holiday destinations. But the natural beauty that draws thousands of visitors to these islands every year is being fast eroded. Many of the close to 25,000 Mediterranean native plants that make the region one of the world's 34 biodiversity 'hotspots' are disappearing. A new conservation tool *The Top 50 Mediterranean Island Plants*, produced by SSC lays out a conservation strategy for species from the familiar hyacinth, carnation, and violet families, along with less known, intriguingly-named plants such as moon trefoil, Lefkara milkvetch, Troodos rockcress, and Casey's larkspur.

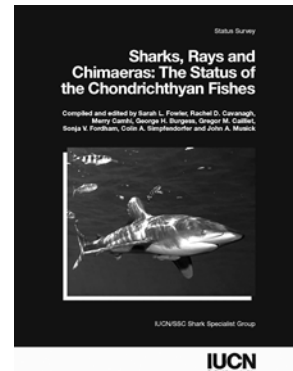
'Top 50' website: www.iucn.org/themes/ssc/plants/Top50/index.html

Applying the Precautionary Principle to Biodiversity Conservation and Natural Resource Management

The Guidelines for Applying the Precautionary Principle to Biodiversity Conservation and Natural Resource Management (NRM) are now available. These Guidelines, currently under review by the IUCN Council, aim to inform and assist decision-makers, policy-makers and managers in interpreting and applying the precautionary principle. They have been developed by the Precautionary Principle Project – a joint initiative of Fauna & Flora International, IUCN/SSC, ResourceAfrica and TRAFFIC and form part of a forthcoming book *Biodiversity and the Precautionary Principle: Risk and Uncertainty in Conservation and Sustainable Use*, to be published by Earthscan. Access the guidelines in English, French or Spanish at www.pprinciple.net

Sharks Status Survey

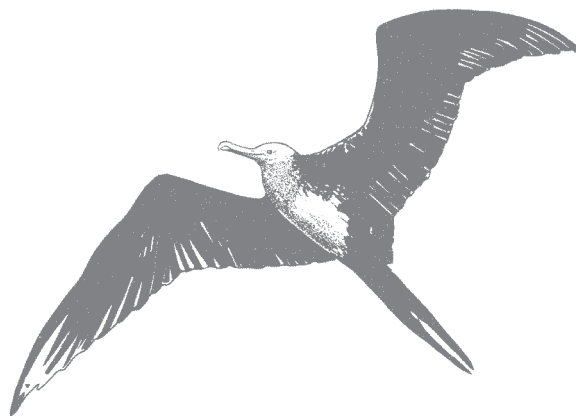
Sharks, Rays, and Chimaeras: The Status of the Chondrichthyan Fishes, compiled by the SSC Shark Specialist Group and the culmination of several years' work is now available. The Status Report goes a long way towards systematically laying out the rationale and need for sustainable management and conservation of chondrichthyan stocks and lays the foundation for a Conservation Action Plan. It can be ordered from the IUCN Bookstore (www.iucn.org/bookstore) and will be available on the SSC website in PDF shortly.



Call to Save Mankind's Closest Relatives

The recently-launched *Regional Action Plan for Conservation of Chimpanzees and Gorillas in Western Equatorial Africa* seeks a multilateral response to the threats facing western lowland gorillas and central African chimpanzees that share the same habitat in six countries. Drafted by more than 70 primatologists, including members of the Great Ape sub-group of SSC's Primate Specialist Group, it identifies 12 areas for emergency programmes.

Read more at: www.conservation.org/xp/news/press_releases/2005/083005.xml



End Notes

Species Programme Staff Comings and Goings

Mariano Gimenez Dixon, Programme Officer for Fauna, has left IUCN after more than 13 years of service to the Species Programme.

Wendy Strahm, Plants Officer for the Species Programme is leaving at the end of February after 13 years.

Alison Rosser, SSC's Wildlife Trade Programme Officer for 11 years has left IUCN to take up a position as Lecturer in Biodiversity Conservation at the Durrell Institute of Conservation and Ecology, University of Kent, UK.

Jim Ragle, formerly of Conservation International is the new manager for the Species Information Service, taking over from Stuart Salter. Jim is based in IUCN headquarters.

Bryan Hugill, intern for the Species Programme for the past 18 months is leaving in January for Pakistan to help finalize the first phase of the Mountain Areas Conservancy Project (www.macp-pk.org) and prepare a funding proposal for the second phase.



Red List Programme News

Red List Update for 2005 Postponed to 2006

A large number of species assessments were submitted for inclusion in the 2005 Red List. Unfortunately, the updating of the Red List website has had to be postponed until early May 2006. Hence, all the assessments submitted for the 2005 update will now only appear in the 2006 update. Apologies to all those who submitted assessments for any inconvenience that this delay may cause.

Mini-2005 Red List Upgrade

Although the 2005 Red List update has been deferred to 2006, the Red List web site has undergone a minor upgrade to incorporate some new functions that hopefully the user community will find very useful. The new features include:

- A “What’s New” page to be used for Important Notices, News Releases, Bulletins and to announce any Data Corrections. This page will be updated regularly and will be used as a communications tool to the Red List and conservation community.
- A Feedback form to enable users to report errors or to submit additional information. Where relevant this information will be forwarded to the appropriate Specialist Groups and Red List Authorities.
- An Export function (appears on the top right of the “Search Results” page) to enable users to download the extended summary results for a particular search query in a format (i.e., CSV or XML files) that can easily be imported into a spreadsheet or database.
- On the Search and Expert Search pages the option to search on all Red List Categories i.e., ‘All Evaluated (including Least Concern)’ has been moved up so it appears second in the list under the default ‘All Evaluated (excluding Least Concern)’. The Red List Programme (RLP) welcomes any feedback on the new features and functions.

Submissions for 2006 Red List Update

As there is still a large backlog of assessments from 2005 to process for the 2006 Red List, the Red List Programme is not requesting the submission of any new assessments at this stage (the deadline for submissions in the past has been the end of April each year). If you have any new assessments that you particularly want to appear in the 2006 Red List because they have significant conservation implications, please contact the Programme office by email at redlist@ssc-uk.org to discuss this further (please submit the new assessment's at the same time as you make contact).

Global Mammal Assessment

The Global Mammal Assessment (GMA) is now in the second year of a three year process. Over the past year, workshops were held on Madagascar mammals; Japanese mammals; Australian, Melanesia, and New Guinea mammals; Amazon, Atlantic Forest, Cerrado, Guyana Shield small mammals, and Southwest Asian mammals.

The GMA partnership with the University of Virginia has progressed and three full-time staff members were hired at the University with the support of the Office of the Vice President for Research and Graduate Studies. These include Cody Schank, an environmental scientist with previous experience working on the GMA, Mandy Haywood, a biodiversity analyst with extensive experience in international conservation including through IUCN, and Diego Tirira, a renowned Ecuadorian mammalogist with expertise on South American mammals.

Preparations are underway for a workshop on Andean small mammals in Colombia in early 2006, a second workshop on Southeast Asian small mammals with the Institute of Applied Ecology's Southeast Asian Mammals Databank, a workshop on European mammals, as well as workshops on marine mammals, small carnivores, and Asian primates. The GMA continues to explore wider collaborations, including expanding those in place with museum and field organizations. The launch of the first products of the GMA will coincide with the launch of the 2007 IUCN Red List of Threatened Species.

New Online Registration System for SSC Members

In an effort to better deal with the enormous task of managing the reconstitution of the SSC (registering all Commission members), IUCN has been developing an online Commission Member Registration System.

This system will allow IUCN to invite a potential member via email, who will then (with their username and password) be required to accept or decline membership via the Internet. Upon acceptance, the Commission member will be able to update and maintain their personal profile information (with the facility to make certain information available to, or hidden from, other members). They will also be able to search the database for contact information on all other Commission members that have accepted their invitations.

The expected official launch date for the system is in January 2006 and all SSC members will be obliged to participate and keep their records updated.



Photo Credits

- Cover In response to reports of an avian influenza outbreak in the Kovsgol Province of Mongolia, VSG scientists joined a team of international researchers to collect biological samples from hundreds of wild birds. © *William B. Karesh*
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- Page 34 Dr Nigel Gericke Medicinal Plants Specialist Group

Contributions to *Species 45* should be sent to
Team Species by **17 April 2006**.

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Hard copies of *Species* are available only upon request. SSC members are encouraged to receive the SSC monthly electronic news bulletin. Please contact *Team Species* at species@iucn.org for more information. *Species* is available electronically at: www.iucn.org/themes/ssc/