

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA



Nineteenth meeting of the Animals Committee
Geneva (Switzerland), 18-21 August 2003

**PROGRESS MADE BY THE IUCN SPECIES SURVIVAL COMMISSION'S SHARK SPECIALIST GROUP IN
ASSESSING THE THREATENED STATUS OF SHARKS AND RELATED TAXA**

Introduction

CITES Resolution Conf. 12.6 on the Conservation and management of sharks refers to the conservation status of shark species as follows:

NOTING that IUCN – The World Conservation Union's Red List of Threatened Species (2000) lists 79 shark taxa (from the 10 per cent of taxa for which Red List assessments have been made);

It also charges the Animals Committee with the following species-specific actions:

DIRECTS the Animals Committee to examine information provided by range States in shark assessment reports and other available relevant documents, with a view to identifying key species and examining these for consideration and possible listing under CITES;

DIRECTS the Animals Committee to make species-specific recommendations at the 13th meeting and subsequent meetings of the Conference of the Parties if necessary on improving the conservation status of sharks and the regulation of international trade in these species;

This Information Document describes the work currently being undertaken by the IUCN SSC Shark Specialist Group (SSG) in order to complete the Red List¹ assessments of the remaining taxa of sharks and related species². The results should assist the Animals Committee with the above species-specific activities.

The threatened status of sharks

Full details of the 70 species of sharks and 35 species of batoid fishes (sawfishes, guitarfishes, skates and rays) that were assessed for the 2000 Red List will appear in Fowler *et al.* (in press 2003). Twenty-four species were assessed as least concern and do not, therefore, appear on the 2000 Red List. Significant progress has been made since the 12th Conference of Parties towards assessing the

¹ The *IUCN Red List of Threatened Species*TM is widely recognised as the most comprehensive source of information on the global conservation status of plant and animal species. Red Lists are among the most widely used tools available to conservationists worldwide for focusing attention on species of conservation concern. They enable management priorities to be targeted and may be used to monitor the long-term success of management and conservation initiatives. The assessments evaluate the conservation status of individual species, identify threatening processes affecting them and, if necessary, propose recovery objectives for their populations. Where entire taxonomic groups are assessed, the assessments can be used as a tool for measuring and monitoring changes in the overall status and knowledge of those taxa.

² The term 'sharks' is generally used to refer to the Chondrichthyan fishes, which comprise elasmobranchs (sharks and batoids; batoids include the skates and rays) and holocephalans (chimaeras and rabbit fishes).

remaining taxa. The aim is to complete, by consultation and consensus within the SSG, Red List assessments for all >400 species of sharks in 2003, and for as many as possible of the other >600 species in time for publication in IUCN's major 2004 review of the Red List. This comprehensive listing will establish a valuable baseline for monitoring improvements in our knowledge of particular taxa, and changes in the overall conservation and management status of the group. In the interim, the 2003 Red List of Threatened Species will list over 200 threatened taxa as a result of work undertaken earlier in 2003.

Reviews of the assessments undertaken to date indicate that the taxa at highest extinction risk include commercially exploited species of deepwater sharks, species restricted to freshwater and brackish water habitats, and coastal endemics whose entire range is subjected to intensive fisheries.

Regional Red List assessment workshops

The SSG is holding a series of regional Red List workshops, supplemented by email consultation. These provide training in the Red List assessment process, facilitate detailed discussions on the status of species by local and international experts, assess the conservation status of chondrichthyan fishes within the region, identify species of conservation concern, and help participants to develop priorities for future work. The aim is to develop Red List Assessments for as many as possible of the remaining unassessed species for inclusion in the 2004 IUCN Red List. Assessments developed at workshops and agreed by consensus of the experts represented there are also circulated after the workshop to all other members of the SSG, prior to submission to the IUCN Red List Programme, in order to ensure that a full SSG consensus is achieved on all listings.

Australian workshop, 7–9 March 2003

The Australasia and Oceania SSG region is responsible for the largest geographical SSG area, including the Western Central Pacific, Southwest Pacific and Eastern Indian Oceans. This area includes the EEZs and adjacent waters of Australia, New Zealand, New Guinea (Papua New Guinea and Indonesian Irian Jaya) and many smaller Pacific island nations. The chondrichthyan fauna of this area is particularly diverse, with ~350 (approximately one third) of all known species occurring in this region. More than half of Australia's chondrichthyan fauna is endemic New Zealand waters support 95 species, approximately 20% endemic. The fauna from other parts of the region is less well documented.

Nineteen SSG members attended the Workshop from the AO regional group, together with members from the USA, UK and South Africa. Other participants included Australian Museum and CSIRO Marine Research experts, and observers from Environment Australia and the Marine and Coastal Community Network (SA). Participants assessed the threatened status of 177 species (151 sharks, 22 batoids and four holocephalans). This includes all shark species known to be endemic to this region (94), and 14 endemic batoids. Globally, 34 species were classified as threatened: four Critically Endangered, six Endangered and 24 Vulnerable. Fifty-two are Near Threatened, 59 Data Deficient and 71 Least Concern. (These totals include the 2000 assessments, some of which were updated.) An additional seven species were classified regionally as threatened in Australia: two Critically Endangered, two Endangered and three Vulnerable. A further five species were classified regionally as threatened in South East Asia: two Critically Endangered, one Endangered and two Vulnerable. These assessments have been agreed by consensus and submitted to the 2003 Red List. A number of additional batoid assessments were also drafted and will be finalised at an SSG 'Batoid Red List Workshop' to be held in early 2004. A workshop report (Cavanagh *et al.* 2003) grant-aided by Environment Australia will soon be posted on the SSG website.

South American Workshop, 23–25 June 2003

This workshop, held in Brazil, was attended by experts from Brazil, Chile, Argentina, Peru, Uruguay, Australia, USA and the UK. This region is also an important centre of chondrichthyan biodiversity, with many endemics. There are around 82 species of sharks and 45 rays in Brazil alone, comprising more than 10% of the global total, while some seven species of chimaeras, 147 sharks and 146 batoids are reported from the whole region. The results of this workshop are not yet available; considerable consultation remains to be undertaken on the approximately 120 Red List assessments agreed by

consensus among workshop participants before an analysis can be provided. These assessments will be included in the 2004 IUCN Red List.

Southern African Workshop, 4–7 September 2003

African waters support some 25% of the world's chondrichthyan biodiversity including a high level of endemism. Participants so far confirmed are from South Africa, Namibia, Madagascar, Tanzania, Kenya, Mozambique, Angola, Mauritania, USA and UK.

Mediterranean Workshop, 29 September–1 October 2003

The Mediterranean contains at least 86 species of chondrichthyan fishes, with only limited endemism. Participants may also undertake assessments of species occurring in adjacent Northeast Atlantic waters. This meeting is being held in conjunction with the annual meeting of the European Elasmobranch Association.

Deep Sea Chondrichthyan Workshop, 27–29 November 2003

Nearly 35% of chondrichthyan species are confined to the deepsea environment. They are considered to be more vulnerable to exploitation than coastal and epipelagic oceanic species, due to their even slower growth and reproductive rates, lower biomass compared to shelf species and the limited productivity and geographic constraints of cold, deepsea environments. There are also high rates of endemism in these species. A Specialist Fringe meeting on deep sea chondrichthyans is being organised by FAO and the SSG prior to the International Deep Sea 2003 Conference in Queenstown, New Zealand. This meeting will enable specialists to present aspects of the ecology, taxonomy, status of stocks and threats to these species, to undertake Red List assessments and to discuss conservation and management recommendations.

Workshops planned in 2004

Planning is currently underway for a Workshop on batoids of the world, to be held in Tasmania, Australia, early in 2004. This will focus on those species of skates, rays and guitarfishes not covered by regional workshops. A workshop is planned in Mexico, mid 2004, to focus on Central and North America, including the Caribbean. Planning is less well advanced for a workshop in West Africa.

The major regions for which funds have not yet been identified and for which workshop planning is, therefore, not yet underway are the Northern Indian Ocean, East Asia and Northwest Pacific. Species assessments may have to be undertaken by correspondence for these regions.

Sources of information

Cavanagh, R.D., Kyne, P.M., Fowler, S.L., Musick, J.A., and Bennett, M.B. 2003. *Conservation Status of Australian Chondrichthyans: Report of the IUCN Shark Specialist Group Australia and Oceania Regional Red List Workshop*. 170 pp. University of Queensland – School of Biomedical Sciences.

Fowler, S.L., Camhi, M., Burgess, G.H., Cailliet, G.M., Fordham, S.V., Cavanagh, R.D., Simpfendorfer, C.A. and Musick, J.A. In press (2003). *Sharks, rays and chimaeras: the status of the chondrichthyan fishes*. IUCN SSC Shark Specialist Group. IUCN, Gland, Switzerland and Cambridge, UK.

IUCN Red List website <http://www.redlist.org>

Shark Specialist Group³ website <http://www.flmnh.ufl.edu/fish/Organizations/SSG/SSGDefault.html>

³ The IUCN Species Survival Commission established the Shark Specialist Group (SSG) in 1991, in response to growing awareness and concern of the severe impact of fisheries on chondrichthyan populations around the world. The SSG provides leadership for the conservation of threatened species and populations of all chondrichthyan fishes (over 1,000 species) and aims to promote their long-term conservation, effective management of their fisheries and habitats and, where necessary, the recovery of their populations. There are ~130 SSG members around the world, all of whom are actively involved in chondrichthyan research and fisheries management, marine conservation or policy formulation. The SSG is divided into nine ocean-region subgroups, led by an Executive Committee of Regional, Deputy and Co-Chairs. A full time Programme Officer works with the Executive Committee to coordinate the work of the group, but the majority of its members provide their time and input voluntarily.