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# IUCN TORTOISE AND FRESHWATER TURTLE SPECIALIST GROUP NEWSLETTER

INAUGURAL JOINT ISSUE  
Issue number 1

Group Co-Chairmen: Peter C. H. Pritchard  
Ian Swingland

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This issued prepared by: Peter C. H. Pritchard

## EDITORIAL

The existence of this newsletter is tangible proof that the "marriage" between the former IUCN/SSC Tortoise Group and the Freshwater Turtle Group is now consummated; from now on, we are the "IUCN Tortoise and Freshwater Turtle Specialist Group," and shall be producing this combined newsletter henceforth. The editorship shall be the responsibility of both of the Group Co-Chairmen (Ian Swingland and Peter C. H. Pritchard), whilst in administrative matters the former holds the larger responsibility for tortoises, and the latter for the freshwater turtles. In addition, the former Chairman of the Freshwater Turtle Group has been drafted back into service, and he (Dr. E. O. Moll, Dept. of Zoology, Eastern Illinois University, Charleston, Illinois 61920) will be producing the next edition. Contributions should be sent to him for that issue. Dr. John Behler of the New York Zoological Society has kindly agreed to assume responsibility for duplicating and distributing the newsletter, and for this generous offer we are most grateful.

The preparation of the overall conservation strategy for the tortoises and freshwater turtles is now well under way. This is being drafted under a special contract by Mr. David Stubbs (84 Westbourne Park Villas, Bayswater, London W2 5EB). Mr. Stubbs recently visited the US where he consulted extensively with Drs. Pritchard, Swingland, and E. Moll. Copies of the draft strategy will be circulated to all group members for comment before it is finally accepted, but it is never too soon to communicate ideas as to what should be included. Such recommendations should go directly to Mr. Stubbs, with copies to the Co-Chairmen.

Meanwhile, Dr. Walter Sachsse has accepted the responsibility of Chairmanship of the Captive Breeding subcommittee, and several members have volunteered to serve on this subcommittee. For the rarest species, captive breeding may be the only possibility of averting total extinction, so this subcommittee's work is extremely important. Input regarding captive breeding strategy should be communicated directly to Dr. Sachsse (Institut für Genetik, Johannes-Gutenberg Universität, Saarstr. 21, Postfach 3980, D-6500 Mainz, Fed. Republic of Germany.)

## NEW TURTLE JOURNAL

We have now seen two issues of a new turtle journal, "Die Schildkröte (N.F.)," published by Hans-Dieter Philippen (Kensterbachstr. 24, D-5138 Heinsberg-Grebben, West Germany), and can highly recommend it. Annual subscription is 50 DM (30 DM for students). The latest issue (Jg.1 Heft 3) includes original articles on tortoises in France, information on Emys orbicularis in France, and reviews of "Schildkröten" by A. Nollert as well as a report on the St. Malo "Exotarium." A major, eighteen-page article by Philippen discusses the distribution and status of the turtles and tortoises of Corsica.

## OPERATION TORTOISE

Since the inaugural meeting, in October 1981, of the IUCN/SSC Tortoise Specialist Group, an action plan for ecological research and the worldwide conservation of tortoises, has been in operation. Because of the existing detailed knowledge and the high level of public interest in tortoises (*Testudinidae*), some success has been achieved in funding two major single-species studies in Europe and N.America and banning the bulk trade in Europe. However, considerable gaps in our knowledge of their status, distribution and ecology has made the task of conserving the remaining 38 species formidable. For this reason OPERATION TORTOISE (OT), a four year global survey of terrestrial chelonians, began in 1985 under the direction of Dr. Ian Swingland, Chairman of the Ecology Research Group (ERG), University of Kent, England and of the SSC Tortoise Specialist Group (the Freshwater Turtle Group combined with the Tortoise Group in October 1986 under the co-Chairmanship of Dr. Peter Pritchard). Mr. Gerald Durrell of the Jersey Wildlife Preservation Trust is the Patron.

OT will involve animal ecologists in a large number of countries who work on the biology of these species, many of which are endangered. Populations are being decimated each year by collecting, fires, development, gassing, dune buggies and other off-road vehicles, missile site construction, competition with grazing stock, for human food when the normal staple foods are absent, and for making into musical instruments.

OT is receiving the help of many institutions, governments and sponsors. The Tortoise Group's network of over 200 members and corresponding members are also helping in supplying local information and intelligence. OT is organised in phases covering Central and South America, SE Asia and India, and Africa. Each phase is coordinated by a member (or members) of the Group or someone closely associated with it and the geographic area. Apart from members, special advisers on this particular project are Chuck Carr and John Behler. The following members and colleagues are involved in drawing the information together, with many others too numerous to mention<sup>x</sup> - anyone wishing to join in please identify yourself to the first named member :-

### 1) Southern Africa

Dr. Bill Branch  
Mr. David Curl  
Mr. John Grieg

*Homopus areolatus*  
Parrot-beaked tortoise, South Africa  
*Homopus bergeri*<sup>1</sup>  
(to be re-instated), Namibia  
*Homopus boulengeri*  
Boulenger's tortoise, South Africa  
*Homopus femoralis*  
Karoo tortoise, South Africa  
*Homopus signatus*  
Speckled tortoise, Southern Africa  
*Psammobates geometricus*  
Geometric tortoise, South Africa  
*Psammobates oculifer*  
Serrated tortoise, Southern Africa

*Psammobates tentorius*  
Tent tortoise, South Africa  
*Kinixys belliana*  
Bell's hinged tortoise, Africa  
*Kinixys erosa*  
Forest hinged tortoise, Central Africa  
*Kinixys homeana*  
Home's hinged tortoise, Central Africa  
*Kinixys natalensis*  
Natal hinged tortoise, Southern Africa

2) South America

Dr. Peter Pritchard  
Mr. Peter Walker  
Dr. Karen Bjorndal, Chairman Marine Turtle Group IUCN  
Dr. Debra Moskovits, University of Chicago Museum

*Geochelone denticulata*  
Forest tortoise, South America  
*Geochelone carbonaria*  
Red-footed tortoise, South America  
*Geochelone chilensis*  
Chaco tortoise, South America

3) North America

Dr. Kristin Berry, PO Box 3119, Truckee, CA 95734, USA  
Dr. Joan Diemer, USFWS, Florida.  
Dr. David Morafka

*Gopherus agassizi*  
Desert tortoise, Mexico, USA  
*Gopherus polyphemus*  
Florida gopher tortoise, USA  
*Gopherus berlandieri*  
Texas gopher tortoise, Mexico, USA  
*Gopherus flavomarginatus*  
Bolson tortoise, Mexico, USA

4) Mediterranean region

Mr. David Stubbs, 84 Westbourne Park Villas, Bayswater, London W2 5EB.

*Testudo marginata*  
Marginated tortoise, Greece, Italy  
*Testudo graeca*  
Spur-thighed tortoise, Mediterranean  
*Testudo hermanni*  
Hermann's tortoise, Mediterranean  
*Testudo horsfieldi*  
Horsfield's tortoise, Eurasia  
*Testudo kleinmanni*  
Egyptian tortoise, S.E. Mediterranean

5) Asia

Dr. Ed Moll  
Dr. Brian Groombridge  
Dr. Rom Whittaker  
Dr. Jim Juvik

*Manouria emys*  
Burmese brown tortoise, Southeast Asia  
*Manouria impressa*  
Impressed tortoise, Southeast Asia  
*Geochelone elegans*  
Indian starred tortoise, Asia  
*Geochelone platynota*  
Burmese starred tortoise, Burma  
*Indotestudo elongata*  
Yellow tortoise, Asia  
*Indotestudo travancorica*  
(including *Indotestudo forsteni*)  
Travancore tortoise, Asia

6) Aldabra, Madagascar and Indian Ocean islands

Dr. Ian Swingland\*  
Mr. David Curl  
Dr. Martin Nicoll  
Dr. Lee Durrell

*Geochelone gigantea*  
[or *Aldabrachelys* (Overidge & Williams  
1957) *elephantina* (Duméril & Bibron  
1835)]  
Aldabran giant tortoise, Aldabra  
*Geochelone radiata*  
Sokake, Radiated tortoise, Madagascar  
*Geochelone yniphora*  
Angonoka, Madagascar  
*Acinixys planicauda*  
Flat-shelled tortoise, Madagascar  
*Pyxis arachnoides*  
Spider tortoise, Madagascar

7) Galapagos

Dr. Tom Fritts

*Geochelone elephantopus*  
[or *Geochelone nigra*, Quoy & Gaimard,  
1824]  
Galapagos giant tortoise, Galapagos

8) Central and Eastern Africa

Dr. Don Broadley  
Dr. Malcolm Coe  
Dr. Don Moll  
Mr. Tom Langton  
Mr. Ian Scoones

*Geochelone pardalis*  
Leopard, or Mountain, tortoise, Africa  
*Geochelone sulcata*  
Spurred tortoise, Africa  
*Chersina angulata*  
Bowsprit, or Angulate, tortoise, South  
Africa/Namibia  
*Malacochersus tornieri*  
Pancake tortoise, East Africa

#### 9) Western Africa

Any suggestions?

Raising the funds and sponsorship represented, what at the outset, looked an impossible problem since tortoises are not by any stretch of the imagination a group which attracts the level of attention that cuddly, anthropomorphic creatures do. Nevertheless Clovis Lande; the Nature Foundation (WWF-SA); British Ecological Society; British Chelonia Group; Kodak (UK) Ltd.; Air France; Jessop Photo Centre; Pelling and Cross; Barclays Bank and Millets have given substantial support. The People's Trust for Endangered Species is helping from its experience in supporting such projects in the past. Without the help of Wildlife Conservation International, a division of the New York Zoological Society which is contributing substantially to OT this project would not have happened.

Of the 40 living species, the status, distribution and ecology of about 8 species are well known. Work on those in North America and Mexico is highly advanced and well documented but information regarding Central and South America is sparse and inadequate. With the help of Group members, an ERG Research Associate (Mr. David Stubbs) and Operation Raleigh, a large number of people from many countries will be working in these latter areas. In discussion with the Director of the Galapagos Research Station, OT agreed in 1985 that a re-examination of the giant tortoise populations is necessary to monitor the effectiveness of the conservation programme and OT has offered any help thought useful. We are hoping that Dr. Tom Fritts will be able to report on this after his next extended visit. Currently work is going on in South Africa by the Natal and Cape Parks Boards with the help of another ERG Research Associate (Mr. David Curl). This work is important since a quarter of the world's species of tortoise live in this area and there has been some confusion over the precise status of these species. Moreover his visit has confirmed the continuing existence of a species thought to be extinct, *Homopus bergeri*. In Kenya the pancake tortoise remains largely unknown but OT has offered support to Nairobi Museum and to any team to find out some basic facts regarding this strange chelonian. Work in many other places is being planned.

The work on tortoises will not be conducted in isolation. Realistic management plans must take into consideration other wildlife, the habitat and local human factors, thus a high degree of liaison with other projects is involved. This will include joint work with senior personnel and collaborating researchers from many countries. The main

body of work will involve collecting existing information from publications and on-going field projects, and presenting them in a particular format; generally this will be done by current workers on tortoise biology. Occasionally it has required supporting researchers in the field to collect specific data. Where possible field work on population dynamics has been tried which is carried out in the same manner at each site visited. It comprises a controlled sampling programme in well defined areas, and all tortoises found are uniquely marked and measured and their activity noted. All data are recorded in a standard format which is directly comparable between sites and with existing data sets for European and other species. The Ecology Research Group at the University of Kent has developed some powerful analytical techniques and its years of experience of working on tortoises make it an ideal coordinating base and data bank for OT. Many other projects of more general scientific interest, such as the evolution of environmental sex determination and various behavioural and physiological strategies, will be undertaken by the more experienced international workers while the basic information pertinent to conservation is being collected.

What are we trying to achieve? Two aims with a single objective:-

The aims,

- a comprehensive report on the status, distribution and ecology of the world's tortoises,

The objective,

- to advance the conservation of tortoises worldwide.

The impetus generated by OT to conserve tortoises will not be dissipated at the end of the project in September 1989 when IUCN will publish the multi-authored report at the FIRST WORLD CONGRESS OF HERPETOLOGY, CANTERBURY, KENT, UK. We hope that all the world's agencies will sponsor and fund implementation programmes, where necessary, based on the OT report to stop some of these animals from becoming extinct. In November 1984 the Species Survival Commission named *Geochelone yniphora*, the Madagascan tortoise as one of the Top Twelve species for conservation. OT, the SSC Tortoise Specialist Group, the ERG, the Jersey Wildlife Preservation Trust, the New York Zoological Society, and especially WWF-US and WWF International are already working on trying to conserve this species and have funded the species recovery project for *Geochelone yniphora*, a project of the IUCN Tortoise and Freshwater Turtle Group, which is under the management of Dr. Lee Durrell. A captive breeding programme is underway and on-ground reviews of the current status have been made by three members of the Tortoise Group and an expedition. The first Field Officer arrived in Madagascar in March 1986 to begin the Species Recovery Programme and the second arrived in January 1987.

#### FORMAT OF EACH OT SPECIES REPORT

##### A) CONTRIBUTORS AND CONTACTS

##### B) INTRODUCTION

- General introduction to biogeographical region;
- Brief history of tortoises in the region;
- Current importance in terms of diversity, numbers, and conservation of tortoises

##### C) SPECIES

- 2-4 page report on each species in region, as follows:

Latin name

Common names

Description and taxonomy (brief; incl. geographical variation)

Status and Distribution

[incl. full documentation, with population analysis if possible; distribution based upon standard grid references with map or maps]

Habitat and ecology

Threats to survival

Conservation: reserves, recommendations etc.

Current Research

(Remarks)

Bibliography

#### D) CONCLUSIONS

Summary of status of tortoises present in region;

Principal threats to their survival;

Conservation measures being implemented or recommended;

Future prospects.

The deadline for receiving final drafts of the species reports and artwork for "OPERATION TORTOISE: THE STATUS AND DISTRIBUTION OF THE WORLD'S TORTOISES" is SEPTEMBER 1 1988. It will be published by IUCN and available at the FIRST WORLD CONGRESS OF HERPETOLOGY, CANTERBURY, KENT, UK from 11-19 September 1989. All contributors will be invited to this Congress for the publication and to attend the scientific sessions and the meetings of the IUCN Specialist Groups.

x my apologies for missing anyone out - or including anyone in! - but I am without my records here in Ann Arbor. Your omission is purely memory failure and your inclusion (without prior invitation) is hope and encouragement (IRS).

<sup>1</sup> John Greig rediscovered this species according to my information about two years ago.

\* currently Visiting Professor and Senior Research Fellow, Museum of Zoology, University of Michigan, Ann Arbor, MI 48109, USA

## GALAPAGOS TORTOISES -- STATUS UPDATE

The following account by Gayle Davis of the Charles Darwin Research Station appeared in the August 1986 issue of Garúa, the newsletter of the Galapagos Guides Club:

"The success story of the Española Island tortoise is almost complete. This race (Geochelone elephantopus hoodensis) was brought nearly to extinction by whalers, who took tortoises in huge quantities for food on their long voyages. The introduction of goats to this small island almost finished the decimated tortoise population through competition for the limited resources.

"Scientists visited Española in the early 1960's, after the establishment of the National Park, as part of a general reconnaissance to learn the status of various native species. They found only 14 tortoises and estimated that no reproduction had taken place on Española since the beginning of this century, largely because the tortoises -- widely dispersed in search of food, which was being consumed by goats -- never encountered one another.

"All the 14 tortoises were brought back to Santa Cruz for breeding in captivity, a program now jointly managed by the SPNG and the CDRS and including 5 other endangered tortoise races.

"Since the first Española hatchlings in this program were born in 1971, some 384 tortoises have been raised and 184 already "re"patriated to the home they had never seen. Obviously, the hope is that natural reproduction will occur and bring the population back to its original size.

"It is with great pleasure, then, that we announce a copulation between two Española returnee tortoises, both 15 years old (No. 24, the male, and No. 35, the female, both hatched in 1971). The two tortoises were seen on 13 May 1986 near El Caco on northern Española, close to the area where they had been released almost exactly eleven years earlier, on 14 May 1975. This does not mean that we can expect to see hatchlings in the near future, since 15-year-old tortoises are probably not yet sexually mature. Nevertheless, it is a very hopeful sign. We join the three Park Wardens and the two CDRS personnel who witnessed this great event in giving a round of applause!"

Meanwhile, the situation on Pinzón (or Duncan) Island is giving some cause for concern. The natural population of tortoises on this island numbers 100 or fewer, all very old adults; introduction of black rats to this island around the 1890's resulted in virtually 100% mortality of all tortoise hatchlings produced. Nevertheless, the old animals were still laying fertile eggs up to recent years, and since 1966 a number of nests have been "rescued" every year, and the eggs hatched artificially at the Darwin Research Station. The hatchlings produced are raised in captivity for several years and then released; to date, 236 young tortoises have been returned to Pinzón.

It appears that the captive head-starting program may have come just in time. Even giant tortoises do not live for ever, and at least eight adults died during the post-El Niño drought of 1985/86. Moreover, nesting appears to have almost collapsed; about 55 nests were found annually in the 1960's, but since 1980 less than ten have been found each year, and only one was located during the 1985 drought. Of the 64 adult females marked between 1963-1969, only 16 have been seen by park wardens in the course of repeated visits to the island. The drought also caused at least some mortality among the now adult-sized oldest



(i.e. 1966) generation of repatriated animals.

Nevertheless, the developments on Pinzón should come as no surprise, and if the over 200 repatriated animals do not reproduce naturally in due course, then there would be little point in continuing with the same methodology indefinitely. The onus is now on the head-started animals to demonstrate that they can replenish their kind; and on the ingenuity of conservationists to devise some means of eliminating the rats on this small but very precipitous island.

#### NEW INFORMATION ON THE ARGENTINE TORTOISE

Issue No. 2 (November 1986) of an important new herpetological conservation journal includes two significant contributions to knowledge of the distribution and status of the Argentine tortoise, Geochelone chilensis. The journal is Amphibia & Reptilia (conservación), published by the Grupo Herpetofauna, Fundación Vida Silvestre Argentina (Leandro N. Alem 968, Capital Federal (1001), Argentina), and the articles are entitled "Geochelone chilensis en Cautividad, Descripción" by Juan X. Gruss, and "Distribución, Hábitat y Registro de Localidades para Geochelone chilensis (Gray, 1870) (Syn. donosobarrosi, petersi) (Testudines, Testudinidae)" by Tomás Waller.

The first of these articles documents the extensive use of this tortoise as a pet in Argentina, and the poor survival prospects of such captive animals. No fewer than 63.45% of the people interviewed in the Buenos Aires area either currently owned one or more pet tortoises, or had had tortoises in the past (the Buenos Aires area has a population of 9,766,030!). About 75,000 individual tortoises are sold annually in the area, and many others are doubtless collected directly from the wild.

These figures are disturbing enough, but the mortality of the captive tortoises is so high as to make the situation tragic. Within two years, about fifty percent of the adult tortoises died, and 60% of juveniles. The species may not yet be endangered to the point of imminent extinction, but this is a frivolous and dangerous use of an important element of the fauna, and we should join with the author of this article in calling for an end to the commercial exploitation of Geochelone chilensis.

The Waller article give a thoroughly documented account of the current distribution and habitat of G. chilensis. The species in Argentina is found from the borders with Bolivia and Paraguay through the western plains and Andean foothills south to 44°S in northeastern Chubut, reaching an altitude of about 1000 m in the northern sector and about 500 m in the south. It thus occurs over 29-30% of the territory of Argentina. It occurs generally in xeric habitats dominated by such vegetation as Schinopsis, Prosopis, Larrea, Opuntia, and Cereus.

#### NEWS FROM AUSTRALIA

Group Co-Chairman Peter C. H. Pritchard spent four weeks in Australia in January and February 1987, and was able to establish personal contacts with several Group members in that continent, including John Cann, Arthur Georges, and

Andrew Burbidge. Pritchard was in Australia primarily to film some of the pleurodires and sea turtles for a forthcoming series of television films on the turtles and tortoises of the world, and he travelled in New South Wales, Queensland, Northern Territory, South Australia, and Western Australia for that purpose.

In Bundaburg, Queensland, it was found that "Torty," the ancient radiated tortoise in the Alexandra Park Zoo that had been brought from Madagascar in 1847 and discussed in the last issue of the Tortoise Group Newsletter, had died a year or two earlier. An autopsy had been performed, but unfortunately it appears that no part of the animal was preserved.

In Perth, it was learned from Andrew Burbidge of the Conservation and Land Management Department that the population of the extremely endangered chelid Pseudemydura umbrina continues to fall. They have apparently disappeared entirely from one of the two reserves set up for the species, and were reduced to a very few dozen individuals in the other. The water regimen of the area has apparently not changed in recent years (it was bone-dry during Pritchard's visit in February, but this is apparently normal for the time of year), but feral foxes continue to be a menace to this species as well as other Australian chelids. Pritchard found abundant evidence of fox predation on Chelodina oblonga at Thomson's Lake just south of Perth. The captive breeding program for Pseudemydura also seems to have reached a standstill, with no reproductive activities (courtship or oviposition) during the last three seasons. Recovery of this species is one of the highest priorities for the Group, and it is to be hoped that the combined expertise of Dr. Burbidge and the newly-formed Captive Breeding Subcommittee will be able to devise some means of persuading these turtles to reproduce. The dilemma is that they are so rare that one can take no chances with any of the individuals in captivity; yet on the other hand, it may be that the extremely stressful climatic cycle that the species experiences in the wild may be necessary to bring them into breeding condition.

#### THE ENDLESS SAGA OF THE FLATTENED MUSK TURTLE

Don Tinkle and Robert Webb could scarcely have imagined the political and regulatory ramifications that ultimately would follow their description of Sternotherus depressus, a small kinosternid localized in north-central Alabama, USA, in 1955. This species was proposed for threatened status by the USDI on November 1, 1985, with the original public comment period to close on December 31 1985. This comment period was extended to February 16, 1986, to allow for a public hearing on the issue, since industrial (primarily coal) representatives in Alabama were convinced that "threatened" status for this species might restrict industrial and mining activities in the region. Detailed studies were commissioned, and it became clear to most observers that this species, with its very restricted range, its susceptibility to pollution (many wild caught specimens show evidence of emaciation and serious disease), recent heavy collection of hundreds of individuals for the pet trade, and changes in population structure (mostly juveniles in the 1950's; mostly adults in the 1980's) was a clear candidate for "threatened" status, at least. However, in a time-honored tradition when controversial decisions have to be made, an panel of outside experts was appointed to examine the evidence for "threatened" status. This panel included some distinguished names (Drs. Plummer, Swingland, Seidel,

Congdon, and Neves), although none of individuals who had previously expressed their opinions on the status of the species. It appears that the panel found no disagreement with the recommendation for "threatened" status (indeed the species is considered "endangered" by the State of Alabama). By law, final action on the proposal had to be taken by May 1, 1987.

The deadline was missed.

#### NO CITES PROTECTION FOR RED-EARED SLIDERS

The red-eared slider (Trachemys scripta elegans) is one of the most familiar turtles in the world, a result of the massive commercial distribution (now world-wide in scope) originating from turtle "farms" in the US States of Louisiana and Mississippi. Banned in recent years from the US retail market because of the danger of buyers contracting Salmonella, the farms have been operating on a somewhat reduced basis but still export somewhere between three and five million hatchlings annually, mainly to Europe and the Far East.

The farms on which these hatchlings are produced are not "closed-cycle;" mortality of breeding stock requires that about 100,000 wild adult turtles be taken annually. In view of this major drain on the wild populations, a petition was filed by the International Wildlife Coalition to have the US propose this taxon for inclusion in the CITES Appendix II at the next meeting of the Parties (Ottawa, July 1987). This designation would require that the US establish a management plan for the species that would establish guidelines for collection of wild stock that would ensure that excessive numbers were not taken. The proposal was published in the Federal Register (January 5 1987, p. 309), but was not subsequently adopted. At this point it is too late for any other country to re-file the same proposal for the July CITES agenda.

#### "THREATENED" STATUS APPROVED FOR THE RINGED SAWBACK TURTLE

The Ringed Sawback Turtle, Graptemys oculifera, is an unusually beautiful species of freshwater turtle with a very limited distribution and exacting habitat requirements. It is confined to the Pearl River (Mississippi/Louisiana) upstream as far as Neshoba County, Miss., and the Bogue Chitto River upstream to Franklinton, Louisiana. It is absent from small streams or still waters, and prefers rivers with wide sandy beaches and a narrow channel with at least moderate current. Its preferred food (molluscs) is very susceptible to water pollution.

In declaring G. oculifera as "threatened," the US Fish and Wildlife Service (Federal Register, December 23 1986, pp. 45907-45910) identified several categories of threats to this species. These included extensive habitat modification by navigation and flood control measures; navigation often requires the removal of snags and logs important as basking sites, and flood control projects contribute to downstream sedimentation and increased turbidity. Former excessive collection of individual turtles for scientific purposes has been replaced by an active trade in the species for hobbyists. Field surveys yielded clear evidence of population decline, few juveniles being found below the Ross Barnett Reservoir, a declining overall population near Jackson, and almost no turtles of any kind existing near Columbia.

No Critical Habitat is declared at present, it being felt that such a declaration would give publicity to the few remaining sites where the species is abundant, and thus facilitate illegal collecting. Essentially, the designation requires Federal Agencies contemplating projects within the species' range to consult with the Service and incorporate conservation measures in project plans; state agencies can enter into cooperative agreements to conserve and recover the species; and taking of the species without a federal permit is prohibited.

#### ALDABRA TORTOISE NOMENCLATURE

A recent paper by Peter C. H. Pritchard (J. Herpetology, 20 (4): 522-534, 1986) demonstrated that J. Schweigger's original description of Testudo gigantea did not correspond to an Aldabra tortoise or indeed to any of the island giant tortoises, but rather to the South American species Geochelone denticulata. This paper followed an opinion published by R. Bour (Bull. Mus. Nat. Hist. Nat., Paris, ser. 4, Section A 1: 159-175; 1984) that Schweigger's Testudo gigantea was a Mascarene tortoise (Cylindraspis), rather than an Aldabra tortoise.

Roger Bour now writes that he has located a specimen in the Paris Museum that is almost certainly Schweigger's type specimen of gigantea. It corresponds rather closely to the dimensions published by Schweigger (there is always some subjective element in measuring tortoises!), as well as in virtually all facets of the description. The specimen is known to have been in the Museum at least as early as 1835, and thus may well have been there when Schweigger studied the collections some two decades earlier. The specimen (to Pritchard's gratification and relief) is without question allocable to Geochelone denticulata!

#### LIST OF MEMBERS IUCN/SSC TORTOISE AND FRESHWATER TURTLE SPECIALIST GROUP

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