

# The development and activities of the British Chelonia Group (BCG)

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For tortoise, terrapin and turtle care  
and conservation



## BACKGROUND

The inaugural meeting of the BCG was held in April 1976, when a small band of enthusiasts proposed forming a new group in the Bristol area for people who were interested specifically in chelonia, as it was felt that other herpetological organisations did not offer them enough specialist information and guidance. The intention was to concentrate on personal contact and veterinary surgeries to gain potential members. This first 'Bristol Chelonia Group' meeting attracted 20 people in a private house and was described in Newsletter No.1, subsequent issues of which soon expanded in content and interest.

At the next few meetings fund-raising began, followed by donations of books, to start a library. Advice was given on tortoise hibernation in the Newsletter and, if the local veterinary surgeon was not familiar with reptile diseases, contact could be arranged with veterinary surgeons John E. Cooper, Peter Holt or the late Oliphant F. Jackson for advice. A long association of these Veterinary Advisers with the BCG was established from this initial offer; Professor Cooper remains the Group's Scientific Adviser to this day, with Professor Peter Holt the current President.

From these small beginnings, membership and activities gradually increased until a small committee was needed and an annual subscription was introduced to help with running costs. The group was renamed the 'British Chelonia Group' to reflect its being the only group in the United Kingdom to cater solely for the chelonian enthusiast; the Newsletter was to be published six times a year, a new scientific journal named *Testudo* would be produced annually and a constitution was subsequently drawn up.

In 1978 the need for regional meetings was agreed, so that members living away from the Bristol area could become more involved, and these are now widely spread over the UK. The committee was enlarged, adding a Conservation Officer, Veterinary Liaison Officer and Fund-raising Officer. In 1987, the BCG benefited from a legacy from Miss Kay Gray, of Exmouth, who was dedicated to chelonian welfare. At this point, charity status was sought and was achieved the following year. Annual symposia were introduced, bringing members in touch with researchers, conservationists and interested veterinary surgeons, and links were forged with

conservation projects worldwide via Annual Appeals. Associations were developed with many organizations and zoos, such as MEDASSET (Mediterranean Association to Save the Sea Turtles), MCS (Marine Conservation Society), GCT (Galapagos Conservation Trust) and Jersey Zoo (now the Durrell Wildlife Conservation Trust).

The Group was honoured in 2001 by Professor David Bellamy, OBE, becoming Patron of the BCG. At a meeting of the GCT at the Geographical Society in London, attended by several BCG committee members, he agreed to support the Group's work for chelonia. As a distinguished conservationist, his interests have specifically included the prevention of unscrupulous development in Turkey that would have destroyed a beach used by nesting turtles.

The final improvement in status came more recently with the Group becoming a charitable company. The remit of the BCG is to be of 'Public Benefit' as well as for chelonian care and conservation.

### The aims of the Group

- To provide chelonia keepers with the support needed to ensure that their captive animals receive quality husbandry.
- To raise funds from members, and from the public, to finance chelonian rescue, research and conservation projects worldwide.
- To discourage the importation and purchase of wild caught specimens, in favour of responsible captive breeding.

These objectives are achieved in the following ways.

### Information for the Public

The advent of the Group's 'Care Sheets' was triggered by a donation from Friends of the Earth via an early BCG member, with updates for various tortoise species as knowledge has increased. They have been available at local meetings and tortoise health checks. These health checks have been held by regional groups all over the country for many years and can attract hundreds of tortoise owners (plus the occasional terrapin). Tortoises are weighed and measured and owners advised to keep records for comparison as a guide to the health and growth rate of their animals, especially before and after hibernation. Often a

veterinary surgeon is present to give professional advice or, if not, the team checking the animals will be able to sex and identify the species and pick out those that need to be taken for treatment. Husbandry, feeding and hibernation advice are all given, and strict protocols are followed to prevent disease transmission.

Publicity has been given to correct hibernation via the BBC's 'Blue Peter' children's television programme, when young BCG members helped TV vet Joe Inglis demonstrate how to prepare Horsfield's tortoises (*Testudo horsfieldi*) for hibernation. Several appearances on BBC television's 'Crimewatch' have helped with the recovery of lost tortoises.

With the coming of the Internet a website was developed, starting with the Group's Care Sheets, making them freely available to the wider public. Further information has gradually been added, including papers from back issues of every volume of *Testudo*, plus conservation topics, details of the appeals, veterinary information and much more.

### **The BCG symposia**

The first symposium was in March 1983 at the University of Bristol, run in conjunction with the Adult Education Department. The morning session was chaired by Dr Roger Avery, with lectures on tortoise anatomy and the Mediterranean tortoise trade and its implications. The afternoon session, chaired by Dr Peter Holt, covered aspects of tortoise disease, finishing with a question and answer session. This set the pattern for an annual symposium, sometimes attracting over 100 delegates, which later moved to a more central location at the Open University in Milton Keynes. Many of the lectures have been published in *Testudo*.

### **The Gilbert White connection**

Several additional meetings were organized by Dr June Chatfield, Curator of the Gilbert White Museum in Selborne. These included visiting the museum at 'The Wakes' (now called Gilbert White's House) and the five acre garden, home of naturalist The Rev Gilbert White's famous tortoise 'Timothy' - owned by his aunt Mrs Snookes for nearly 40 years and inherited by him when she died in 1780. This was the venue for the first formal AGM of the Group.

### **The Northern Symposium**

In 1995, the need for a symposium accessible to members in more northerly locations resulted in the first such event taking place at Blackpool Zoo, with the lecture room packed to capacity by the 80 delegates. The venue subsequently changed to the larger lecture theatre at Chester Zoo. Speakers have ranged from students to professors, hobbyists to zoo-keepers, vets to conservationists and virologists to homeopaths - truly something for everybody.

### **Re-homing**

This is a perpetual problem, for several reasons. Firstly, the longevity of tortoises, which may reach over 100 years of age, means many will outlive their owners. Secondly, the

difficulties of keeping exotic species (especially terrapins and tropical tortoises) may prove to be too much in effort and expense for their keepers, where they not only have to provide specific conditions all the year round, but also, for the larger species, considerable space. Thirdly, some individuals are not as docile as you might expect and their continual molesting of their companions means they have to be re-homed if they cannot be kept separately. Over the years, many hundreds of animals have been placed with new owners, with the Re-homing Officer always ensuring that facilities are satisfactory in the new home and that the animals will not be offered for sale. The latter is to comply with the strict CITES (Convention on International Trade in Endangered Species) regulations that apply to protected species. To help with any subsequent health problems, a 'veterinary fund' is set aside to assist the new owners if unable to afford essential treatment.

### **Lost and Stolen Tortoises**

In 1997, retired Police Inspector John Hayward became the Group's Theft Co-ordinator. His role is with the National Theft Register, which assists zoos and animal societies in the recovery of lost or stolen exotic species. He has issued security guidelines to members, and has been instrumental in recovering many missing tortoises. Some of the lucky ones include five tortoises stolen from a garden in Hampshire: thanks to a newspaper appeal, they were recovered in rather dubious circumstances after a reward was offered. In another case, a leopard tortoise *Stigmochelys pardalis* in Norfolk was accidentally scooped up by refuse collectors, but was recovered thanks to swift intervention. 'Lost and found' reports are now a regular feature of the BCG Newsletter, and the importance of being able to prove ownership of tortoises by photographing distinctive features, 'fingerprinting' or microchipping has been emphasised.

### **Microchipping**

CITES, to which the UK became a party in 1976, was given official recognition in Europe when EC regulations were introduced in June 1997. This meant that commercial trade of all 'Annex A' species, which includes Mediterranean tortoises, was banned, apart from certain exemptions for breeding and scientific research. These exemptions depended on the animals being identified by microchip implants. There was great concern about the health implications of this, especially for small tortoises, and approaches were made to the Department of the Environment (DoE, as it then was). In 1998 a meeting was held between government officials, representatives from the BCG, the British Veterinary Zoological Society (BVZS) and from other veterinary interests and tortoise groups. As a result, the regulations were changed so that microchips were not implanted into tortoises under 10cm in length. Since then, smaller microchips have also become available and these ISO compliant mini microchips, 8.5mm long, may be implanted in tortoises of 5cm in length.

### The BCG Tortoise 'Fingerprinting' Scheme

This was originally set up when it was realized that the plastron patterns of individual tortoises are unique and can be used as a means of identification. For a small fee, BCG members can submit a photographic record of their tortoise's plastron to be kept on a database. A 'found' tortoise then has a better chance of being re-united with its owner.

### BCG AWARDS

The BCG makes a number of different awards, from the largest funded by the Annual Appeal, down to smaller individual grants. Feedback is often given at the symposia, and many projects result in reports for *Testudo*.

### The Annual Appeals

Major tortoise, terrapin and sea turtle projects have all benefited from the thousands of pounds raised by the appeals and over the past few decades BCG members have helped to raise over a quarter of a million pounds. The situation of some endangered species is so alarming that the appeal has been repeated, as with the tortoises of Madagascar. The following examples show just a few of the diverse projects that have been supported.

#### Tortoises

In 1990 the giant tortoises of the Seychelles benefited from the appeal for 'Operation Curieuse' when members supported the London Zoo's project to relocate a breeding group of Aldabran giant tortoises *Dipsochelys dussumieri*



**Figure 1.** Arnold's tortoises *D.arnoldi* being allowed to swim ashore after transportation from Silhouette to Grande Barbe islande island, Seychelles.



**Figure 2.** Adult and juvenile tortoises being transported to Cousine island, Seychelles.



**Figure 3.** Tortoises on the plateau of North island just after arrival. (Photo courtesy North island)

to the island of Curieuse in the Seychelles. Subsequent breeding of *D. hololissa* and *D. arnoldi* on Silhouette island by the Nature Protection Trust of Seychelles (NPTS), from the few remaining tortoises found, was so successful that the population expanded greatly (Gerlach, 2003; 2005; 2007) and many tortoises were relocated to other islands (Fig. 1).

Sadly, political interference can sometimes disrupt the most successful of conservation schemes and eventually all the tortoises had to be relocated (Gerlach, 2011; Figs. 2 & 3).

In 1993 £5,000 was raised for 'Project Angonoka'. With only 50 ploughshare (or Angonoka) tortoises *Astrochelys yniphora* left in the wild in Madagascar, urgent action was needed to save them from extinction, and the BCG's appeal funds helped Jersey Zoo set up a captive breeding programme. In 1996 it was the turn of the Madagascar flat-tailed tortoise, *Pyxis planicauda*, which was becoming rare: money was raised to help their 'Kapidolo' project, financing the installation of equipment for captive breeding in a near-natural environment, and funding further study of this little-known tortoise in its native habitat. Funds were raised again in 2006 and 2012. The Durrell Wildlife Conservation Trust has spent over thirty years working to restore the threatened populations of these tortoises and their 2012 report for the BCG can be found at <http://www.britishchelonigroup.org.uk/bcg-info/conservation/info>.

In 1998, in a joint venture with the GCT, the appeal raised thousands of pounds towards building and equipping a laboratory on Isabela island to support the captive breeding programme of *Chelonoidis nigra*. The Charles Darwin Research Station Tortoise Breeding Centre has been a huge success, without which the Espanola subspecies *C. n. hoodensis* would almost certainly have become extinct, as the Pinta subspecies *C. n. abingdoni* now is with the demise of 'Lonesome George'. More appeal money has been raised towards repopulating Pinta island and studying the released tortoises with the aim of achieving ecological restoration and a balanced ecosystem (Rowley, 2012; Figs. 4 & 5).

Representatives from the BCG have visited both the Galapagos and Seychelles projects, among other overseas visits.



**Figure 4.** Searching for tortoises on Pinta island, Galapagos.



**Figure 5.** Downloading data from Galapagos tortoise #58's data-logger.



**Figure 6.** Dozens of market stalls each with hundreds of turtles can be found on the Xing Ping market in Guangzhou. (Photo by Peter Valentin)

***Terrapins (including freshwater turtles)***

In 1997 the 'Re-re' appeal raised £4,500. This big-headed side-necked turtle from Madagascar was losing its battle with habitat destruction and human consumption, and the BCG helped fund captive breeding ponds in Ampijoroa. In 2010 a second appeal helped fund the release and monitoring of juvenile turtles.

The critically endangered turtles of Asia were supported a number of times. The Burmese roofed turtle *Kachuga trivittata* was one of these, after a specimen was found by a collector on a Chinese food market. It was thought to be extinct, but others were subsequently found in a sacred 'pagoda pond' and this led to a breeding facility for a 'Colony of Assurance' being set up at Mandalay Zoo, with holding ponds being funded by the BCG in the 2005 appeal. The BCG also linked up with Jersey Zoo to facilitate breeding of the rare flowerback turtle *Cuora galbinifrons*, and helped fund the International Centre for the Conservation of Turtles (IZS) at Muenster Zoo (Meier & Raffel, 2007; Figs. 6 & 7).



**Figure 7.** Turtle tanks in the IZS. Tanks for *Cuora* species are kept separate as they are so sensitive to disturbance; other attractive species are on public display. (Photo by Martina Raffel)



**Figure 8.** A TED such as this, with the escape hole arrowed, can dramatically reduce turtle mortality.

### Sea turtles

In 1993 money was raised to assist MEDASSET in their research into the effects of long-line fishing on the turtle population in the Ionian Sea. This and other research has exposed the high mortality rate of turtles (and other creatures) from the practice and in spite of turtle exclusion devices (TEDs) being available, more still needs to be done to involve fishing communities (Gopi et al, 2007; Fig. 8).

1999 was the BCG's 'Year of the Marine Turtle'; members contributed £6,000 towards many worthwhile causes to help the endangered sea turtles, funding expeditions and research to help understand their habits and devise ways of protecting them from the activities of humans.

### Conservation awards

These are made to individuals or research teams worldwide, who apply in the first case to the BCG Conservation Officer. Some reflect our appeals, as with other Madagascan species in danger of extinction such as the attractive spider tortoise *Pyxis arachnoides*.

Some are for educational projects, particularly with the realisation that much more progress is made with saving species when local people are involved in a positive way rather than trampling on their traditions (White, 2013). The need for cooperation became very evident when student researchers teaming up with 'SOS Tobago' had their turtle nest protection markers deliberately destroyed; every effort is made to prevent such occurrences by education of the local community and encouragement of fishermen to become involved. Details of that organisation's activities can be found at <http://sos-tobago.org>.

Certain other awards are made on a regular basis to ensure continuation of local links, as with the Cyprus 'Turtlewatch' scheme whereby Glasgow University students have worked with local people and with staff at RAF Akrotiri monitoring trends in turtle nesting and safeguarding nests and hatchlings (Downie et al, 2003; Fig. 9).



**Figure 9.** The protected nest of a loggerhead turtle *Caretta caretta* is excavated two days after most hatchlings have emerged, to rescue any that remain trapped - in front of a crowd of local people and RAF personnel, preceded by an educational presentation.

Numerous other awards have been made, such as for the purchase of satellite transmitters (in collaboration with MCS) to track the migrations of sea turtles, thereby helping to devise protection strategies for them. The tortoise rescue and breeding facility SOPTOM at Gonfaron, France has also been supported and visited by members. These are just a few examples.

### Student Award Schemes

Exeter University students have been able to apply for funding towards a research project with turtles or tortoises. A notable study was on the possible inter-species breeding between the introduced red-eared slider *Trachemys scripta elegans* and the indigenous hickatee *T. decussata* on Grand Cayman (Parry 2009).

### The Kay Gray Award

In recognition of a lifetime devoted to improving the welfare of chelonia, an annual Kay Gray Award was established for an outstanding contribution to chelonia in any field of activity. The winner is presented with a rose bowl and a cheque. Among recent recipients is George Balazs, who has spent his life in sea turtle research. He was instrumental in setting up a volunteer turtle watch in Hawaii at a beach where, almost uniquely, turtles haul out to bask and the visiting tourists are monitored. A completely different example is the award presented to The Cambridge Veterinary Group, who donated many hours to health checking and microchipping terrapins destined for the Carapax rescue centre in Italy (see below). Tuition was also given in how to microchip the Seychelles giant tortoises before their final distribution around the islands.

### The Oliphant Jackson Memorial Fund

This was set up after the untimely death of Dr Jackson, in recognition of his pioneering work in chelonian medicine, to encourage research in this field. A sum of money is awarded to any veterinary surgeon or student for an approved research project or case report in this field. A typical paper, on the treatment of serious rat-bite wounds on a tortoise, can be seen at <http://www.worldwidewounds.com/2007/february/Cousquer/Tortoise-Rat-Bite-Injuries.html>.

### The importation problems

At an early stage in the Group's development, the rate of importation of tortoises into Britain was being criticized in the national press, suggesting 99% failed to survive poor transport conditions following capture or get through their first hibernation. Concerns were also being expressed by researchers who were studying dwindling Mediterranean tortoise populations (e.g. Lambert, 1979).

In 1978 the BCG committee outlined a policy statement concerning the trade in commonly imported species of terrestrial tortoises, i.e. *Testudo graeca*, the spur-thighed tortoise, and *T. hermanni*, Hermann's tortoise. The main concerns were the unknown effect on populations in the wild, the way the animals were transported, the high mortality

rate during the first year of captivity and the possible health risks. During this era, field studies were being carried out on tortoise populations in France, Greece, North Africa and the former Yugoslavia, which helped lay the foundations for population ecology (e.g. Meek, 1985; Stubbs et al., 1985).

#### The DoE and tortoise imports

In 1981, in reply to the BCG Conservation Officer concerning the tortoise trade, the DoE agreed to write to traders to ensure compliance with the size of at least 20cm in length; however, very small tortoises were still being imported. By 1982 anyone purchasing an imported tortoise had to sign a form issued by the DoE agreeing to comply with certain principles of husbandry for the animal, making the buyer liable to a fine of up to £400, but this proved to be unenforceable. Due to the efforts of various herpetological organizations, including the BCG, in seeking to ban the import and trade in Mediterranean tortoises, the announcement finally came that this would cease at the end of 1983. The ban duly came into force in 1984.

#### The red-eared terrapin problem

There were also concerns over the difficulty in finding suitable homes for the increasing number of unwanted red-eared terrapins. By 1989 thousands of red-ears, imported during the 'Ninja Turtle' craze and sold at pocket money prices, were dying annually. The survivors were causing problems both for their owners and for the environments in which they were being illegally abandoned. A working party was set up with the BCG and other animal welfare groups. At the AGM in 1991, the members passed a resolution to take all steps possible to influence the government, CITES and other responsible bodies to end the import of red-eared terrapins and their trade within the UK except under licence. The import of this species was eventually banned in 1998.

To try and address the problem of unwanted terrapins, the BCG appeal in 1992 was for donations towards trying to set up a refuge. A site was identified at the 'Secret World' wildlife sanctuary in Somerset, where a large greenhouse was offered in which to set up the project, named the Red-eared Terrapin Education Centre. The facility was finally finished in 1997 and was officially opened by Simon King, the wildlife film maker.

In 2000, the Annual Appeal raised a large sum towards another such facility. In a link-up with the Carapax organisation in Tuscany, which already housed both terrestrial and aquatic chelonia, the 'Louisiana Project' developed a secure purpose-built lake with continuously replenished water. After a veterinary check and microchipping, terrapins needing new homes were transported to Italy, with the collaboration of Virgin Express Airlines and much publicity. Many flights took place, relocating unwanted terrapins from all over the country to their new lake in Italy to live out their natural lives. Although the Carapax Centre has now closed to the public, the remaining terrapins are still being cared for.

#### The future

With the support of a generous membership, and contacts with conservation bodies and the veterinary profession in Britain and around the world, the BCG can continue to improve the lives of tortoises, terrapins and turtles in captivity and in the wild. The management team and regional groups are run by volunteers, and the symposium speakers give up their time for the Group for no reward. In this way the BCG continues to thrive for the benefit of chelonia, their keepers and their environment.

Past and current Presidents: Peter Holt, Ian Swingland.

BCG Chairmen: Derek Foxwell, Diane Tottle, Peter Holt, Robert Harper, Diana Pursall, Oliphant Jackson, June Chatfield, Bob Langton, Don Freeman, Henny Fenwick.

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