

JAMES RENNIE BEQUEST

REPORT ON EXPEDITION/PROJECT/CONFERENCE

Expedition/Project/Conference Title: Archelon, the sea turtle protection society for Greece.....

Travel Dates: 23rd June – 1st August 2003

Location: Kyparissia, Greece

Group Member(s): Elizabeth West.....

Aims: To gain field work experience on an endangered species.

OUTCOME (not less than 300 words):-

I worked as a volunteer for Archelon, the sea turtle protection society for Greece. Started in 1983 aiming to protect the Loggerhead turtle (*Caretta caretta*), It has now expanded to many nesting sites on the Peloponnesus and on islands such as Crete and Zakynthos. I was based in Kalo Nero in Kyparissia, which is the second most nested beach in Greece. Each turtle will only nest at the beach from which it emerged as a hatchling therefore it is important to protect all of the nesting sites.

The Loggerhead turtle (*Caretta caretta*) is classified as an endangered species and thus is protected under national law and international conventions. Within Greece these have been:

Presidential decree no. 617. Prohibits fishing of sea turtles, the destruction of eggs and the collection of hatchlings. (1980).

Presidential decree no. 67. *Caretta caretta*, *Chelonia mydas* and *Dermochelys carriacea* as protected species. Prohibits killing, mutilation, trade, capture or export. (1981).

Internationally the protection has been under:

Convention on the international trade in endangered species of wild fauna and flora (CITES).

Convention on the protection of European wildlife and natural habitats (Bern Convention 1979).

Convention on conservation of migratory species of wild animals (Bern Convention 1979).

Convention of the protection of the Mediterranean Sea against pollution (Barcelona Convention 1976).

Protocol concerning Mediterranean specially protected areas (Geneva 1982).

Archelon obtains specific permits from the ministry of Agriculture to undertake work with sea turtles. Data gained is used to lobby national and international bodies. It is currently being decided by the government whether Kyparissia will become a National Marine Park following that of Zakynthos.

As a volunteer I was involved in public awareness and carried out seasonal fieldwork. This was divided up into morning survey, nest protection and night survey.

Morning survey is conducted daily at dawn due to the high summer temperatures. Early starts enabled us to find the turtle track before tourists eroded them. Covering approximately 4km of beach we searched for turtle tracks.

We followed the tracks to see whether a nesting attempt was made. If the area of beach is littered or they are interrupted, turtles often re-enter the sea without making an attempt. Nest features are identified and recorded. This allows us to see how far the turtle got in nesting and where the eggs are likely to be. Features are 'swims' where the turtle uses all flippers while moving forwards, 'body pits' where the turtle uses all

flippers to dig herself into the beach, 'egg chambers' where the turtle uses her hind flippers to gently cover the eggs in soft sand and the hind flippers create the 'camouflage'. Relocations are necessary when there is risk of severe inundation by the sea, crushing by vehicles, next to plants with invasive root growth or that the original nest chamber is only 15cm deep. All relocations are done before 10am due to the high temperature. Egg trays are used to avoid rotation and compression. The eggs are relocated further up the beach or into beach hatcheries. Nests are under threat from dogs and foxes. We protect nest using wire grids and bamboo.

Night survey runs from 11 pm till 5am. During night survey data is collected on nesting females. A small red light torch was used to record the data. No other light is used so not to frighten away the turtles. The females are tagged. Tagging is necessary to record internesting interval, nest site fidelity, turtle size, frequency of injuries and epibiont species, long distance migrations, nesting beach filopatry and remigration intervals. Tagging is done after the turtle has finished laying. They are double tagged in case one is lost. Monel metal tags are used on the 1st or 2nd membrane on the trailing edge of the fore flippers and jumbo plastic tags are used on the hind flippers on the membrane between the two proximal digits.

The fieldwork was physically demanding especially during morning survey when temperatures often reached 42degrees by 10am. At first acclimatising was made harder by changing of shifts. However by the end of the first week I was surprised by how much my body had adapted to the heat and the sleep patterns. It was an extremely enjoyable and rewarding experience, especially when two inches behind a metre long nesting female. It is believed that out of every thousand hatchlings, one will make it to a breeding adult. So hopefully I might have helped save three or four turtles.