

AMENDMENTS TO APPENDICES I AND II OF THE CONVENTION

Other Proposals

A. PROPOSAL

Inclusion of *Clemmys insculpta* in Appendix II.

B. PROPONENT

The United States of America.

C. SUPPORTING STATEMENT

1. Taxonomy:

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| 11. Class: | Reptilia |
| 12. Order: | Testudines |
| 13. Family: | Emydidae |
| 14. Species: | <i>Clemmys insculpta</i> (Le Conte) |
| 15. Common Name: | English: Wood turtle
French:
Spanish: |

16. Code Numbers:

2. Biological Data

21. Distribution: The wood turtle ranges from eastern Canada (Nova Scotia and New Brunswick) southward to northern Virginia, westward through southern Quebec, southern Ontario, New York, and Pennsylvania to Michigan, northern Wisconsin, eastern Minnesota, and northeastern Iowa (Ernst and Barbour, 1972; Conant, 1975; Iverson, 1986).
22. Population: An estimated population density of 12.4 adult wood turtles per hectare (ha) was given by Harding and Bloomer (1979) for ideal habitat in northern New Jersey. However, it was noted that the individuals observed were not evenly distributed, but tended to concentrate in favored basking and feeding areas. Wood turtle populations are reported by most experts to be distributed linearly along rivers or streams. Another New Jersey study (Farrell and Graham, 1991) reported an overall density of 10.7 wood turtles/ha in a population of 316 animals inhabiting a 61 ha site.

Few attempts have been made to quantify wood turtle populations or compare them with those of sympatric species. Ernst and Barbour (1972) reported that *Clemmys insculpta* comprised 2.3% (28 of 1,218) of the turtles caught over a three year period at a study site in Lancaster County, Pennsylvania. All were

adults (16 males, 12 females). Wood turtles appear to have considerably lower population densities than certain turtle species inhabiting ponds and lakes.

Harding and Bloomer (1979) gave no comparable estimates for wood turtle populations studied in Michigan but noted that density are considerably lower than in New Jersey ("...almost certainly less than one turtle per acre of habitat" or 2.5/ha). The tendency for wood turtles to concentrate in limited areas of the available habitat was noted in both Michigan and New Jersey. Turtles numbers in both the New Jersey and Michigan study areas were reported to be "declining steadily."

A majority of the researchers contacted for a range-wide survey of the status of *C. insculpta* (by Harding, 1990-1991) stated that wood turtles had declined in numbers or had been become extinct in many areas. Although quantitative published studies are lacking, anecdotal and informal information indicate that wood turtles are becoming scarce or are now extirpated in many places where stable populations once existed. Their dependence on woodland habitats along rivers makes them vulnerable to habitat alteration, pollution, siltation, and road mortality.

Wood turtles often pass the winter hibernating on the bottom or under banks in shallow streams. They remain in or near the water early in spring. In some areas, suitable nesting sites are scarce and females are forced to concentrate nesting activity at a few locations.

23. Habitat: Range-wide, the wood turtle appears to be largely restricted to the vicinity of moving water (rivers, streams, and associated near-shore and floodplain habitats). They are somewhat aquatic in spring and fall, with both mating activity and winter dormancy occurring in water according to most studies. In summer, many populations exhibit movement into wooded and field habitats. Based on recent studies (Vogt, 1981; Harding, 1990), eastern populations are more terrestrial than Great Lakes populations. Wood turtles are omnivorous with considerable reliance on plant products, and feeding occurs both on land and in water (Ernst and Barbour, 1972; Harding and Bloomer, 1979).
24. Reproductive Ecology: Wood turtles are slow-maturing, long-lived animals characterized by low ratios of juveniles to adults and very low recruitment of juveniles into the breeding population (Garber, 1988; Klemens, 1989, Harding, 1990). Harding (1990) reported a Michigan population in which 82% of the total of turtles marked over a 20 year period were adults.

Nest mortality varies from 80 to 100%, and hatchling survival is reported to be very low (Garber, 1988, Harding, 1990). Predation on adults is minimal, and as turtles approach maturity survival rates increase.

3. Trade Data

31. National Utilization: Wood turtles are desired in the pet trade which has led to a considerable demand for this species. Wood turtles frequently appear for sale on reptile dealer price lists, and prices paid for adult specimens vary from \$35 to \$95 apiece. Most specimens offered for sale are wild-caught. Few captive-bred specimens ever enter trade. Turtles seeking nesting sites congregate at known locations, and are vulnerable to over-collection.

The collection of wood turtle in the wild is seasonal (early spring and early summer) and they are easy to collect at these times. In early summer, adults concentrate in nesting areas and in summer (August - September) hatchings are susceptible to capture.

32. Legal International Trade: Turtles of the genus *Clemmys* are in demand for the overseas pet trade and are reportedly desired by European terrarium hobbyists (Fritzsche, pers. comm.). The extent of this international trade is difficult to assess, but demands for *Clemmys* are increasing. Reportedly, Japan has been importing turtles from North American and Asia, both for food and as pets.
33. Illegal Trade: Reportedly, much of the trade in *Clemmys insculpta* is based on illegally collected animals (Harding in litt.) taken from states where they are protected. In spring 1990 "hundreds" of wood turtles entered the market and were often openly declared to have been collected in Maryland. According to Glenn Therres (Nongame and Endangered Species Program Manager for Maryland), state law prohibits the collection of native reptiles for commercial purposes. Other *Clemmys insculpta* advertised for sale on the 1990 reptile dealers lists were taken from Pennsylvania (Harding, in litt.). Pennsylvania also prohibits commercial collecting of reptiles and has a possession limit of two specimens of native turtles (Shiffer, pers. comm.). There are reports of wood turtles offered for sale (with yellow coloration) indicating that they were probably taken from the Great Lakes region, where they are protected by state laws.

4. Protection Status

41. National - Canada and U.S.A.: The designations of an "endangered or threatened species" by particular states usually does not include concomitant protection of a species' habitat. Massachusetts has protected wetland breeding habitats of endangered species since 1988. In 1992, a law protecting all endangered species' habitats will take effect in that state. Other states have a variety of laws regulating land development with regard to rare species and wetlands. Privately owned lands are often exempted from these restrictions.

Table I below summarizes the available information on laws relating to *C. insculpta*. This species has received considerable protection on the state and provincial levels in the U.S. and Canada, respectively. Even where not specifically protected, they are often covered by statutes that prohibit commercial collection of reptiles or impose bag limits on recreational collecting/keeping of reptiles.

Table I. Protection Status According to Province or State

Province / State	Protection Status
CANADA	
New Brunswick	Receives protection under general wildlife regulations
Nova Scotia	Protected
Ontario	Protected. Closed season on all turtles

Province / State	Protection Status
Quebec	Protected
UNITED STATES	
Connecticut	Protected (possession limit = 1). Collecting permit required. Open season May 1-Aug 13; no open season on eggs or juveniles
Iowa	Endangered
Maine	Not protected, but status under review
Maryland	Not Protected. All commercial collecting of reptiles prohibited. Collecting for scientific purposes only with a permit
Massachusetts	Species of Special Concern. Collecting permit required. All commercial collecting prohibited
Michigan	Protected. Scientific collector's permit required
Minnesota	Threatened
New Hampshire	Not protected, but status under review
New Jersey	Threatened. Scientific collecting permit required for all species. All commercial collecting prohibited
New York	"Small game" - no open season. Scientific collecting permit required
Ohio	Not specifically protected. Turtles cannot be taken by shooting. Turtles protected on most public lands
Pennsylvania	Not protected. Daily and possession limit = 2; commercial collecting prohibited
Rhode Island	Protected. Commercial collecting of reptiles prohibited
Vermont	Protected. Commercial collecting prohibited
Virginia	Legislation pending, which would fix bag limit = 3 and prohibit commercial collecting
West Virginia	Legislation pending
Wisconsin	Threatened

42. International: None.

43. Additional Protection Needs: Protection and trade monitoring at the national and international levels are desirable.

5. Additional Remarks

Wood turtles are vulnerable to depletion of their adult breeding population. According to Harding (1990) they cannot be exploited without their population structure being

damaged. Collection, coupled with habitat loss and fragmentation has resulted in a long term decline of *Clemmys insculpta* throughout its range. Protection under CITES Appendix II is desirable at this time since it will provide better monitoring and control of international trade.

6. References

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