

Species Dossier

State of New York
Endangered Species Working Group
Date compiled:

Common Name: Wood Turtle
Scientific Name: *Clemmys insculpta*
Family: Emydidae

I. General Status

Current New York Status: Game species - special concern
Current Federal Status: Unlisted
Recommended New York Status: Unlisted (special concern, Peterson pers. comm.)

Current status in surrounding states/provinces:

Connecticut:
Massachusetts: state special concern
New Jersey: state threatened
Ohio: out of range
Ontario:
Pennsylvania:
Quebec:
Vermont:

Current Natural Heritage rank (TNC): G4 (Y) S4
global state

Global and North American Ranges:

Nova Scotia to eastern Minnesota; south in the east to the Virginias; an isolated colony in northeast Iowa. Isolated records in southern Quebec and northern New York.

New York's position within global range:

central peripheral disjunct

II. Historic New York Status and Distribution (>25 years ago)

Provide numbers and/or percent of state occupied and/or number of regions occupied (and basis for estimates), narratives, maps (if available and appropriate), and references/documentation:

Distributed statewide.

III. Current New York Status and Distribution

Provide numbers and/or percent of state occupied and/or number of regions occupied (and basis for estimates), narratives, maps (if available and appropriate), and references/documentation:

Distributed statewide except absent from Long Island, northwest and western New York. Introduced to Staten Island.

IV. Author's Current Estimate of Population/Habitat Trends

Population Trend _____ Essential Habitat Trend

Declining	Declining
Stable	Stable
Increasing	Increasing
Unknown	Unknown

V. Biological Description

1. Reproductive information:

Breeds in New York:

Confirmed in last 2 years yes

Confirmed in last 10 years yes

Confirmed in last 25 years yes

Confirmed prior to 25 years ago yes

Unconfirmed

OR

2. Does not breed in New York; is migrating or seasonal?

OR

3. Species periodically expands or contracts into or out of New York?

Age to sexual maturity 14 years for &'s and %'s (breeding individuals of either sex had no less than 14 plastral annuli in New Jersey).

Number of breeding attempts per year Possibly 2 attempts, spring and occasionally in the fall.

Average number of young per breeding attempt 4-12 eggs, up to 18.

Estimated number of reproductive years per female 40+ years.

Other narrative on species biology:

Wood turtles are diurnal creatures and are active in the northern parts of their range from mid to late April through September or November, varying with climatic conditions. Individuals emerge from aquatic winter sites and bask extensively in the early spring. Males generally emerge first and are more active than females at this time of year. Wood turtles tend to be more aquatic in the spring, subsequently shifting to an almost entirely terrestrial existence as the season progresses. Evenings are generally spent in water or in shallow forms in soil under grass, leaves or bushes.

During the breeding season, males range widely in search of suitable mates. Breeding occurs from late March to April and is preceded by a rather lengthy courtship display involving both sexes. The male will mount the female's shell and copulation takes place exclusively in the water. Fall copulations may occur between October and November. Following the breeding season, encompassing the period between mid-May and late October, individual *Clemmys insculpta* become more or less solitary animals. Egg laying occurs in June and females may undertake long migrations to locate suitable nest sites usually in areas of sandy or soft loam, gravel banks, roadsides, fields or meadows. Eggs ranging from 27-42mm x 19.5-26.3mm are laid in an excavated burrow approximately 15cm deep and incubate for approximately 70-71 days. Hatching occurs sometime in August. Hatchlings are gray-brown in color and lack the adult orange coloration on the head and legs. They weigh between 4.6-10 grams and have a plastron length range of 22.0-31.4mm and carapace

length range of 28.0-37.9mm.

The wood turtle's diet consists of a variety of prey items. Adults feed on ripe fruits, mushrooms, green leaves of various plant, fish, snails, earthworms, insects and carrion. Young turtles sustain themselves mostly on small invertebrates, adding more plant matter to their diet as they get older. Growth is initially rapid in young turtles and the rate decreases over time until about the 8th or 9th year when individuals may experience a surge in growth rate. This is probably a secondary result of an increase in hormone levels associated with sexual maturation.

VI. Habitat
(describe type, vulnerability, distribution and trend in amount
overtime, also estimate future trends -- do you expect habitat
to be lost in future? Amount, location, type?)

The wood turtle is not known to have strict habitat requirements, although they are more often found in forest, riparian and wetland habitats. Individuals have been found moving through all types of terrain and habitats. They frequent slow moving, meandering streams with sandy or mud bottoms and overhanging alders. Found in moist woods and meadows near streams or ponds. Wintering sites are include within muddy banks and abandoned muskrat burrows, on the bottoms of non-frozen streams (buried in the streambed) or wedged up under the dirt banks of a stream. Basking sites include banks of streams and rivers or on logs or other suitable resting sites that emerge from the water.

VII. Discussion of Problems/Threats/Limiting/Overall Vulnerability
(of both individuals and essential habitat):

1. Loss or fragmentation of habitat through human activities (e.g. housing/industrial developments, road construction) and other incursions is likely the greatest threat.
2. Collecting for illegal pet trade, particularly of the more conspicuous mature adults, may pose some threat.
3. Vehicular collisions.

VIII. Additional Study, Documentation, Research or Management Needed:

1. Protection from poachers and illegal collectors.
2. Radio telemetry studies to better understand spatial biology and habitat use.
3. Better protection of wetland and upland habitats.
4. Education to increase public awareness (turtle crossing signs).

IX. Prognosis for Recovery:

Potentially good. Populations of the wood turtle are probably doing well in protected areas. Developmental pressure and other human disturbances outside of these areas need to be better regulated to ensure the presence of this species in the future.

X. Documentation/References:
(also list or attach pertinent references, survey documents,
studies, etc.)

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3. Behler, J.L., R.W. King. 1979. The Audubon Society Field Guide to North American Reptiles and Amphibians. Alfred A. Knopf, Inc., New York.
4. Carr, A. 1969. Handbook of Turtles, The Turtles of the United States, Canada and Baja California. Comstock Publishing Associate, Ithica, NY.
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14. Kaufmann, J.H. 1986. Stomping for Earthworms by Wood Turtles, *Clemmys insculpta*: A Newly Discovered Foraging Technique. Copeia 4: 1001-1004.
15. New York Natural Heritage Program Biological Conservation Data System/ New York State Department of Environmental Conservation. October, 21 1991. Summation of Natural Heritage ranks for Amphibians and Reptiles.
16. Prichard, P.C.H. 1979. Encyclopedia of Turtles. T.F.H. Publications, Inc. Ltd., Neptune, NJ.
17. Quinn, N.W.S., D.P. Tate. 1991. Seasonal Movements and Habitat of Wood Turtles (*Clemmys insculpta*) in Algonquin Park, Canada. J. Herpetol. 25(2): 217-220.
18. Tynning, T.F. 1990. A Guide to Amphibians and Reptiles. Little, Brown and Company, Boston, MA.

XI. Experts Consulted/Reviewers of Dossier:

1. Allen Peterson

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Preparer's Status Recommendation:

Endangered
Threatened
Special Concern
Status Unknown
Status Secure
(no listing)