The Pine Barrens Treefrog

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SCIENTIFIC NAME: *Hyla andersonii*

STATUS: Listed as threatened by the State of New Jersey

DISTRIBUTION: Considered by many to be a symbol of the New Jersey Pinelands, the distribution of the Pine Barrens treefrog is limited to this portion of the state. Other populations can be found in the southern Alabama/Florida panhandle area and the sandhills of North and South Carolina.

IDENTIFYING CHARACTERISTICS: The adult Pine Barrens treefrog is a rich, emerald green bordered by white with a lavender or plum color that extends from the white border down onto the belly. The concealed surface of the hind legs is yellow to orange. The average snout-to-vent length of an adult is 2.8 to 4.3 cm. (1.1 to 1.7 in.). "Suction cups" on the ends of the fingers and toes allow treefrogs to climb with great agility. Treefrog vocalizations can be described as a series of nasal "honks." Although they often begin calling at the end of April and may continue into August, the best time to hear them is on warm, humid nights from May through June.

HABITAT CHARACTERISTICS: In New Jersey, treefrogs have been reported to occur in a variety of natural habitat types including wet areas in pitch pine lowlands, intermittent streams and ponds, backwater areas along streams, seeps, small pools in sphagnaceous bogs, isolated ponds, and Atlantic white cedar swamps. They have also been reported from artificial habitats such as cranberry bogs, stream impoundments, vehicle ruts, borrow pits, and roadside ditches. Of these habitats, treefrogs prefer temporary, early successional pond-like habitats dominated by shrub and herbaceous vegetation. They generally do not occur in great numbers in habitats that contain fish such as permanent ponds, streams, and impoundments. Preferred breeding ponds are typically isolated, shallow, dilute, and acidic (e.g., pH 3.74 - 4.69). Shrubs may be limited to the pond periphery leaving some open water or they may dominate the pond. Treefrogs usually call from vegetation but can also be found on the ground. Several other frog species can be heard calling at treefrog ponds, including carpenter frogs, southern leopard frogs, green frogs, Fowler's toads, and (especially) northern spring peepers. Because treefrogs breed late in the season and prefer temporary ponds, they may be more vulnerable to drought conditions and changes in water levels than species that breed earlier or at sites with permanent water. Studies in artificial ponds suggest that treefrogs may be poor competitors, and they are not normally found at sites where nonnative frogs, such as bullfrogs, and nonnative fish are present. Treefrog populations within developed or agricultural areas are probably most at risk because of the presence of bullfrogs, other nonnative frogs, and nonnative fish associated with these human-altered landscapes. Most of the habitat for Pine Barrens treefrogs is located within land that is protected through the New Jersey Pinelands Comprehensive Management Plan.

BREEDING: Pine Barrens treefrogs usually deposit eggs during May and June, and the tadpoles metamorphose into adults in July and August. One study found that the majority of treefrogs remain within 70 meters (230 ft.) of the breeding site throughout the breeding season, but have been found calling from distances greater than 100 meters (328 ft.). As the breeding season wanes, treefrogs move and call from stations further away from the breeding site. Little is known about treefrog habitats during the non-breeding season.

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