

ROUND-TAILED MUSKRAT

Neofiber alleni

Order: Rodentia
Family: Cricetidae
FNAI Ranks: G2/S2
U.S. Status: none
FL Status: none



Description: A large rodent (total adult length is 10.75 - 15 in. = 273 - 381 mm). Sparsely furred tail is round in cross section, and about half the length of the body. Ears are small (.6 - .9 in. = 15 - 22 mm) and round. Snout is short and tipped with many long whiskers. Longer fur hairs (guard hairs) are dark brown and shiny; underfur is a rich brown, and individual hairs have light-colored bases. Long, sharp toenails are evident on all feet. Constructs conspicuous dens (houses) by weaving grasses and other marsh vegetation into domes of varying size.

Similar Species: Black rat (*Rattus rattus*) and Norway rat (*Rattus norvegicus*) have hairless ears and tails and a long, cone-shaped snout. Cotton rat (*Sigmodon hispidus*) has a grizzled appearance with long, lightly furred tail about equal to the body length. Common muskrat (*Ondatra zibethicus*) exceeds 16 in. (406 mm) in total length and has a laterally flattened tail.

Habitat: Inhabits depression marshes, basin marshes, wet prairies, salt marsh, and agricultural crops grown in moist or submerged soils where water levels are low (Birkenholz 1962, Chapman 1889, Faller 2014, Lefebvre 1982, Pifer et al. 2012). The presence of maidencane (*Panicum hemitomom*) is an important factor (Birkenholz 1962, Faller 2014, Pifer et al. 2012, Tilmant 1975). When water levels drop seasonally Round-tailed Muskrats abandon houses and form underground burrow networks (Birkenholz 1962, Lefebvre 1982, Schooley and Branch 2006).

Seasonal Occurrence: Active year-round; nocturnal and crepuscular.

Florida Distribution: Throughout most of Florida excluding the Keys. Historically as far west as the Choctawhatchee River (Lefebvre and Tilmant 1992) and south throughout the peninsula. Has apparently disappeared from most coastal sites.

Range-wide Distribution: Above-mentioned Florida distribution and southeastern Georgia in four counties.

Conservation Status: Patchily distributed; protected on several state and federal conservation lands, including the extensive marshes of Paynes Prairie and Avon Park Air Force Range. Threatened by isolation of populations resulting from development and wetland drainage. Included in Florida Fish and Wildlife Conservation Commission's Species of Greatest Conservation Need.

Protection and Management: Maintain natural hydrology in wetlands. Occasional fires are needed to maintain the marsh habitat. Because vegetation needed for food and cover grows back more slowly after winter burns, growing-season burns may be preferred. Regular growing-season prescribed fire of surrounding uplands, especially if there are other wetlands within 2 km, can be crucial to successful dispersal (Schooley and Branch 2009). Cattle grazing should be discontinued, at least around natural wetlands, because the disturbance reduces habitat quality and occupancy (Faller and McCleery 2016, Schooley and Branch 2009). Creation of new ditches should be avoided, especially near wetlands, and existing ditches should be filled to restore natural hydrologic patterns because subpopulations are more likely to go extinct as distance to a roadside ditch decreases (Schooley and Branch 2009). Limit urban sprawl to less than 15% landcover within 2 km of known muskrat occurrences (Faller and McCleery 2016). Create culverts beneath roadways that cross through occupied wetlands to avoid road mortality (Smith and Franz 1994).

References: Birkenholz 1963, Brown 1997, Humphrey (ed.) 1992, Whitaker 1996.



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