



Grand Manan & White Head



Fauna Checklists

Around Grand Manan, New Brunswick, Canada, the tidal range is about 5.8 to 6.7 m (19 to 22') depending on the phase of the moon. The tides get progressively higher as you move northeast along the Bay of Fundy toward Saint John and ultimately the Minas Basin in Nova Scotia, where the highest tides in the world have been recorded. Tides are higher on the full and new moons and are called the spring, drain or full tides. Neap tides, or smaller, dead tides, occur when the moon is in the first and third quarters. [Tide](#) tables published by the Canadian Hydrographic Service can be purchased or local islanders can be consulted. If you are in doubt, be on the safe side and do not leave your vehicle on the beach or cross an area you may not be able to get back over when the tide comes in. *Remember tide and time wait for no one.* The great tidal pump in the Bay is responsible for an abundant marine life including plankton, invertebrates, fish, whales, dolphins, porpoises and seals and seabirds.

The influence of the Bay of Fundy also modifies the climate, giving us a typical "Maritime" climate, late spring, cooler summer (and fog), extended fall, moderate winter. Most islands in the archipelago are wooded with a few exceptions such as the Duck Islands (Great, High and Low Duck) Outer Wood and numerous ledges. Beech, oak, and pine were common when settlers arrived in the late 1700's but logging and fires changed the predominant species to spruce, fir, tamarack or larch, birch and maple. Bogs are common complete with cedars, orchids and insectivorous plants. The fauna on the islands has a long history of introductions from mammals to reptiles to amphibians. In exposed areas such as Southern Head, trees are twisted from the wind.

TERRESTRIAL FAUNA

**BIRDS | LAND MAMMALS | REPTILES AND AMPHIBIANS | LAND
INVERTEBRATES | FRESHWATER FISH |
BUTTERFLIES & MOTHS | DAMSELFLIES & DRAGONFLIES |**

BIRDS: John James Audubon, the great naturalist and painter, visited White Head Island in May of 1833. His glowing reports of the abundant bird life inspired a steady stream of visiting naturalists that continues to this day. Currently, almost 363 species of [birds](#) have been recorded from the Grand Manan Archipelago, of which an average of 250 are seen on an annual basis, while half that number regularly breed here. (See Grand Manan Birds – PDF for list)

LAND MAMMALS: The Grand Manan Historian, No. XX. "The Other Creatures", 1978, gives a good account of the mammals of the archipelago.

Few non-domestic land mammals make their home in the archipelago. The only native non-

flying, non-swimming species are two rodents - a meadow vole and a deer mouse, both of which are larger than mainland counterparts and have been given sub-specific status. When the Loyalists settled here, no large mammals made their home on the islands. Even beaver and otter were absent although native middens (shell and bone heaps) do contain beaver remains. Both would be expected to colonize the islands given their strong swimming ability and today both are present, but only the otter has introduced itself. Beavers were brought over in ca. 1948 by residents for the purpose of establishing a population which could be trapped for pelts. Four other species of rodents have been introduced, muskrats ca. 1935 intentionally to be trapped, the Norway rat and house mouse mostly likely on ships, and the American red squirrel unintentionally (although there is some question as to whether the squirrels were introduced or arrived on their own).

Snowshoe hares (varying hares) in 1951 and the European, or domestic, rabbit first in ca. 1925 were introduced, again for trapping purposes or lately as pets. The red fox was introduced to the island (again for trapping) in the early 1870's, multiplied rapidly and nearly wiped out the snowshoe hare population and a herring gull colony at Southwest Head. By 1905 they were uncommon and soon disappeared. Raccoons were accidentally introduced ca. 1905 when a pair escaped from captivity. They are now well established throughout the island. A farming enterprise brought American mink to Grand Manan ca. 1925 but none exist today.

Caribou may have existed on Grand Manan, perhaps swimming over from the mainland but the evidence is scarce. The Loyalists introduced moose in 1784 but they did not thrive despite Provincial protection in 1805, largely because of hunting pressures. The protection lapsed in 1824 and by 1835 the last moose was killed. In 1845 white tailed deer were brought to the island and again despite protection were eliminated through over hunting. They were re-introduced in 1909 with a few animals added from time to time since then. Unlike the deer mouse and meadow vole, the deer tend to be smaller than their mainland counterparts. Red-tailed deer now live on the island but are kept in enclosures on two game farms, although some escaped when a gate was accidentally left open. All deer were recovered.

The greatest number of species of any order of land mammals is of bats, of course, capable of flying to and from the island. Seven species of bats are known for New Brunswick, and five have been collected from the Grand Manan Archipelago with the possibility of the other two occurring at some point.

Domestic mammals include cattle, horses, goats, pigs, cats, dogs and occasionally others such as ferrets, gerbils, hamsters, etc., kept as pets.


Terrestrial Mammals - Native	Terrestrial Mammals - Introduced	Domestic Mammals
Meadow Vole (<i>Microtus pennsylvanicus copelandi</i>)	Moose (extirpated) (<i>Alces alces americana</i>)	Cattle
Deer Mouse (<i>Peromyscus maniculatus argentatus</i>)	White-tailed Deer (<i>Odocoileus virginianus borealis</i>)	Horses
River Otter (<i>Lutra americanus</i>)	Snowshoe Hares (Varying Hares) (<i>Lepus americanus struthopus</i>)	Red Deer



American Beaver? (<i>Castor canadensis acadicus</i>)	European (Domestic) Rabbit (<i>Oryctolagus cuniculus</i>)	Pigs
Caribou? (<i>Rangifer tarandus caribou</i>)	Muskrat (<i>Ondatra zibethicus zibethicus</i>)	Goats
Little Brown Bat (<i>Myotis lucifugus lucifugus</i>)	American Beaver (<i>Castor canadensis acadicus</i>)	Cats
Long-eared Bat (<i>Myotis keenii septentrionalis</i>)	House Mouse (<i>Mus musculus domesticus</i>)	Dogs
Silver-haired Bat (<i>Lasionycteris noctivagans</i>)	Norway Rat (<i>Rattus norvegicus</i>)	Ferrets
Red Bat (<i>Lasiurus borealis borealis</i>)	American Red Squirrel (<i>Tamiasciurus hudsonicus gymnicus</i>)	Gerbils
Hoary Bat (<i>Lasiurus cinereus</i>)	Red Fox (extirpated) (<i>Vulpes vulpes rubricosa</i>)	Hamsters
	Raccoon (<i>Procyon lotor lotor</i>)	Rabbits
	American Mink (extirpated) (<i>Mustela vison vison</i>)	

REPTILES AND AMPHIBIANS: There is a sparse representation of species of amphibians and reptiles in the Grand Manan Archipelago, all most likely introduced in farm products such as potted plants or hay. Two species of amphibians, the wood frog and the eastern American toad, live on the island. The wood frog is heard calling in the early spring. Two species of non-venomous snakes, the northern redbelly snake and the eastern smooth green snake, are both found on the island, although their distribution is not wide spread. Reports of turtles are sporadic and it is thought that all are escapees or deliberately liberated. A wood turtle(s) with a hole in its shell where it was tethered has been seen over the years, sometimes walking along the shore or across roads. Another was recently trapped in a lobster trap stored behind a house. It did not have a hole in its shell. A snapping turtle was brought to the island recently but it is not known if it was released. Red eared sliders kept as pets have been released but it is unknown if they survive the winter.

Amphibians - Introduced	Reptiles - Introduced
Wood Frog (<i>Rana sylvatica</i>)	Northern Redbelly Snake (<i>Storeria occipitomaculata occipitomaculata</i>)
Eastern American Toad (<i>Bufo americanus americanus</i>)	Eastern Smooth Green Snake (<i>Opheodrys vernalis</i>)
	Wood Turtle? (<i>Clemmys insculpta</i>)
	Snapping Turtle? (<i>Chelydra serpentina</i>)
	Red Eared Sliders? (<i>Trachemys scripta elegans</i>)

FRESHWATER FISH:  Arthur MacKay collected specimens of freshwater fishes during field work from 1962-1964. He summarizes his work in "[The Freshwater Fishes of Grand Manan Island. Bay of Fundy, New Brunswick, Canada.](#)" American eel, brook trout, sticklebacks and mummichog are euryhaline (can survive wide ranges of salt levels) and no

doubt reached Grand Manan via the ocean. Smallmouth bass and brown trout were introduced. Eastern banded killifish and northern lake chub are freshwater only. It is not known if they were introduced as feed for bass or are native. A summary of his findings include:

Freshwater Fish	Introduced/Native	Status and Distribution
Brown Trout (<i>Salmo trutta</i> L.)	Introduced	6 fish introduced in Long Pond; status unknown
Brook Trout (<i>Salvelinus fontinalis</i> (Mitchill))	Native and Introduced	all drainage systems
American Eel (<i>Anguilla rostrata</i> (LeSueur))	Native	believed in all drainage systems with connection to ocean
Eastern Banded Killifish (<i>Fundulus diaphanus</i> (LeSueur))	Native or Introduced?	Millers Pond, possibly other ponds and streams
Mummichog (<i>Fundulus heteroclitus</i> (Linnaeus))	Native	Big, Long, & Whale Cove Ponds, probably Castalia Marsh and lower reaches of some streams
Northern Lake Chub (<i>Coesius plumbeus</i> (Linnaeus))	Native or Introduced?	Millers Pond
Smallmouth Bass (<i>Micropterus dolomieu</i> Lacepede)	Introduced	introduced in Millers Pond and Eel Lake
Ninespine Stickleback (<i>Pungitius pungitius</i> (Linnaeus))	Native	Long & Big Ponds, Eel Lake, probably other lakes and streams
Three-spined Stickleback (<i>Gasterosteus aculeatus</i> Linnaeus)	Native	Salt water ponds


LAND INVERTEBRATES: More lists of land invertebrates will be added in the future but for now we have a list of butterflies and moths.

BUTTERFLIES & MOTHS SEEN ON GRAND MANAN: This list is compiled from a number of sources. For reference to the province, the [New Brunswick Naturalists](http://www.newbrunswicknaturalists.com) site has a complete list including French common names.

Skippers:	Dreamy Dusky Wing (<i>Erynnis icelus</i>)	Blues:	Summer Azure (<i>Celastrina neglecta</i>)
	Arctic Skipper (<i>Carterocephalus palaemon</i>)		Spring Azure (<i>Celastrina ladon</i>)
	European Skipper (<i>Thymelicus lineola</i>)		Northern Blue (<i>Lycaeides idas</i>)

	Laurentian (Common Branded) Skipper <i>(Hesperia comma laurentina)</i>		Silvery Blue <i>(Glaucopsyche lygdamus)</i>	
	Peck's Skipper <i>(Polites peckius)</i>			
	Tawny-Edged Skipper <i>(Polites themistocles)</i>		Sulphurs:	Common (Clouded) Sulphur <i>(Colias philodice)</i>
	Long Dash Skipper <i>(Polites mystic)</i>			Orange Sulphur <i>(Colias eurytheme)</i>
	Hobomok Skipper <i>(Poanes hobomok)</i>			Pink-edged Sulphur <i>(Colias interior)</i>
	Dun Skipper <i>(Euphyes vestris)</i>		Elfins:	Brown Elfin <i>(Callophrys augustinus)</i>
Commas & Nymphs:	Question Mark <i>(Polygonia interrogationis)</i>	Coppers:	American Copper <i>(Lycaena phlaeas)</i>	
	Eastern Comma <i>(Polygonia comma)</i>		Bog Copper <i>(Lycaena epixanthe)</i>	
	Green Comma <i>(Polygonia faunus)</i>	Whites:	European Cabbage White <i>(Pieris rapae)</i>	
	Gray Comma <i>(Polygonia progne)</i>	Swallowtails:	Black Swallowtail <i>(Papilio polyxenes)</i>	
	Compton Tortoise Shell <i>(Nymphalis vaualbum)</i>		Canadian Tiger Swallowtail <i>(Papilio canadensis)</i>	
	Milbert's Tortoise Shell <i>(Nymphalis milberti)</i>	Fritillaries:	Great Spangled Fritillary <i>(Speyeria cybele)</i>	
	Mourning Cloak <i>(Nymphalis antiopa)</i>		Aphrodite Fritillary <i>(Speyeria aphrodite)</i>	

	American Painted Lady (<i>Vanessa virginiensis</i>)		Atlantis Fritillary (<i>Speyeria atlantis</i>)
	Painted Lady (<i>Vanessa cardui</i>)		Silver-bordered Fritillary (<i>Boloria selene</i>)
	Red Admiral (<i>Vanessa atalanta</i>)	Checkerspots:	Harris' Checkerspot (<i>Chlosyne harrisii</i>)
	White Admiral (<i>Limenitis arthemis</i>)	Wood Nymphs:	Inornate Ringlet (<i>Coenonympha tullia inornata</i>)
	Viceroy (<i>Limenitis archippus</i>)		Eyed Brown (<i>Satyrodes eurydice</i>)
	Common Buckeye (<i>Junonia coenia</i>)		Common Wood Nymph (<i>Cercyonis pegala</i>)
Milkweeds:	Monarch (<i>Danaus plexippus</i>)	Crescents:	Northern Crescent (<i>Phyciodes selenis</i>)
Northerns:	Pearly-Eye Northern (<i>Enodia anthedon</i>)		

DAMSELFLIES & DRAGONFLIES SEEN ON GRAND MANAN:  Grand Manan species may include the following. Please refer to the [provincial list](#) compiled by Stu Tingley for the larger provincial list.

DAMSELFLIES	DRAGONFLIES	
Spotted Spreadwing <i>Lestes congener</i>	Canada Darner <i>Aeshna canadensis</i>	Four-spotted Skimmer <i>Libellula quadrimaculata</i>
Common Spreadwing <i>Lestes d. disjunctus</i>	Variable Darner <i>Aeshna interrupta interrupta</i>	Wandering Glider <i>Pantala flavescens</i>
Taiga Bluet <i>Coenagrion resolutum</i>	Shadow Darner <i>Aeshna umbrosa umbrosa</i>	Spot-winged Glider <i>Pantala hymenaea</i>
Azure Bluet <i>Enallagma aspersum</i>	Common Green Darner <i>Anax junius</i>	Saffron-winged Meadowhawk <i>Sympetrum costiferum</i>

Familiar Bluet <i>Enallagma civile</i>	American Emerald <i>Cordulia shurtleffi</i>	Black Meadowhawk <i>Sympetrum danae</i>
Marsh Bluet <i>Enallagma ebrium</i>	Ski-tailed Emerald <i>Somatochlora elongata</i>	Cherry-faced Meadowhawk <i>Sympetrum internum</i>
Hagen's Bluet <i>Enallagma hageni</i>	Hudsonian Whiteface <i>Leucorrhinia hudsonica</i>	White-faced Meadowhawk <i>Sympetrum obtrusum</i>
Eastern Forktail <i>Ischnura verticalis</i>	Common Whitetail <i>Libellula lydia</i>	Band-winged Meadowhawk <i>Sympetrum semicinctum</i>
Sedge Sprite <i>Nehalennia irene</i>	Twelve-spotted Skimmer <i>Libellula pulchella</i>	Yellow-legged Meadowhawk <i>Sympetrum vicinum</i>

Have a Question? E-Mail us at: info@grandmanannb.com

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