Long Island **National Wildlife Refuge Complex** P.O. Box 21, 360 Smith Road Shirley, NY 11967 631/286 0485 1 800/662 1220 TDD 1 800/421 1220 voice

Federal Relay Service for the deaf and hard-of-hearing 1 800/877 8339

US Fish & Wildlife Service 1 800/344 WILD http://www.fws.gov

September 2004





U.S. Fish & Wildlife Service

Wertheim
National Wildlife Refuge

Lower Carmans River Guide



A Lifeline for Wertheim NWR

Welcome to the Lower Carmans River, part of the Wertheim National Wildlife Refuge! The Carmans River starts as a freshwater stream and ends in the Great South Bay, providing both fresh- and saltwater habitats. Hundreds of species of plants, fish, birds and mammals flourish here, depending on the River and adjacent lands for survival amidst surrounding urbanization.

If you're quiet and patient, you may just catch a glimpse of life along the River.

Enjoy your visit!

way to Boston!

Waters Steeped with History

Native Americans
People have been canoeing on the
Carmans River for centuries. Long
before white settlers arrived on Long
Island, the Unkechaug Tribe whaled
and fished here in dugout canoes.
Some of these canoes held up to 80
people and could be paddled all the

English Settlers
When families from the English
colonies across Long Island Sound
arrived, they were drawn to the
Carmans River for fish and game.
The settlers built mills along the

Male wood duck





Carmans River

banks, and eventually a shipyard and a duck farm. A ferry used to run to Smith Point Beach during the summer. Duck hunting served many as sport for game, and at one time much of the lower river was a private hunting preserve.

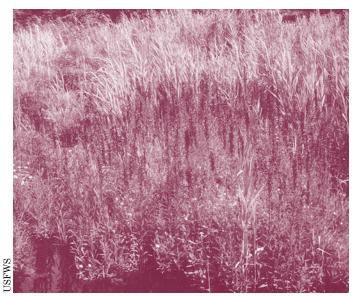
Wildlife Managers and
Conservationists
To protect the land for future
generations, owner Maurice
Wertheim left it to the federal
government to become the Wertheim
National Wildlife Refuge in 1947.
Lucille Wellington donated another
area of wetland at the mouth of the
River.

In 1974, thanks to the dedication of members of the community and Students for Environmental Quality—a local high school group—the Carmans River became the first to be protected under New York State's Wild and Scenic River Act.

The U.S. Fish and Wildlife Service protects the Carmans for wildlife and for people; please respect the River as an unspoiled part of our local heritage.

A River for All Seasons

Spring breeds new life
Spring is full of activity along the
Carmans River. By late March,



Cardinal flower

osprey return to refurbish their large, stick nests. The spikes of the skunk cabbage emerge along the riverbanks and the flowers of the swamp maple bloom red and yellow. The call of breeding spring peepers from nearby ponds can be heard in the late afternoon hours. On sunny days, turtles warm themselves on the river's edge. Among the *Phragmites*, male redwing blackbirds establish their breeding territories and show off their red shoulder patches. Green herons return from the south, while out near the Bay, the bufflehead congregate before moving to breeding grounds farther north.

Summertime nurseries burst with color

By late spring and early summer many birds are raising their families. Be careful not to approach the nest or young of the mute swan; they can be very aggressive when threatened. Beautiful wood ducks nest in June; you will see wood duck nesting boxes on short poles along the river, with a metal collar around the bottom to keep out predators. Red cardinal flower, blue irises, pink marsh mallow and fragrant white swamp azalea are

in bloom. The tops of the *Phragmites* turn purple.

Fall changes send birds south Shorter days, crisp nights, turning leaves—don't miss a trip down the River in Fall! Many species migrate south at this time of year. In late September, migrating tree swallows dart above the river in undulating flocks before plummeting into the Phragmites to roost for the night. While you may see hawks passing overhead, you're sure to observe Canada geese flying south in their distinctive V-shaped patterns. Black and orange monarch butterflies also migrate now, and can often be seen feeding on vellow goldenrod. Along the shore, leaves turn red and yellow—the tupelo and poison ivy first.

Winter waterfowl wait for warmth Winter is a dynamic time on the river. Some years the bay and parts of the river freeze over. But you may spot bufflehead and coot near the mouth. Great blue heron stalk the water's edge searching for a meal, while black duck and Canada geese gather where the ice gives way to open water. Mergansers, hooded and common, move along the River's brackish and salty waters. Many Belted kingfishers return early, as soon as the ice has melted, while some stay year-round.





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Find Your Way — Navigate by Landmarks

Section I — Montauk Highway to Squassux Landing
Paddling south of Montauk Highway, you will see the high arch of the Long Island Rail Road Montauk Branch bridge before you. On the west side of the River you may be able to see remains of the old Robinson Duck Farm, active into the 1970s. Look for tupelo trees and red maple. In the spring, skunk cabbage grows along the bank. You can see kingfishers, swans, geese and ducks.

Depending on the tide, you may need to duck as you pass under the second, lower bridge. In the spring and early summer, look for swallow nests made of mud packed under the bridge, but be careful not to disturb eggs or young. Beyond the second bridge, on the east side of the river, is a large island that can be circumnavigated at high tide.

Across from the island, on the west side, lie the headquarters of the Wertheim National Wildlife Refuge Complex (landing is not permitted). After the refuge dock, a small creek leads inland; here you can catch a glimpse of the White Oak Nature Trail, accessible from the Wertheim NWR parking lot.

View from Wertheim NWR Headquarters Continuing south around several bends, you will come to Steve Barto's Creek (also called Yaphank Creek)





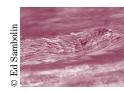
Yaphank Creek

where riparian wildflowers like the fragrant swamp azalea bloom. South of this creek are the remains of Commander Rochester's Dock. Following the bends in the river, you will see the sign for Indian Landing on the east side, beside a large cherry tree. At Indian Landing you can beach your craft and follow a 1-mile trail through oak and pitch pine. To the south of the landing jut the remains of another dock. Farther along you will come to Little Neck Run, once the site of the Leskowitz Duck Farm. Stands of cattails survive here among the invasive *Phragmites*.

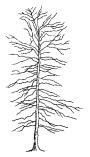
Section II — From Squassux
Landing to the Great South Bay
Leaving Indian Landing and
following the river south, you will
eventually see the bulkheads of
Squassux Landing to the west, where
people often fish and crab. Directly
south of the bulkheading is a canoe
ramp, the last putout along the river.
Along the west bank are docks,
filled with boats in the summer. At
the southern end of the docks is the
entrance to Newey's Canal, also
called Tooker's Creek, which leads to

Beyond this canal, also on the west side of the river, you will pass a private dock. Here, near the mouth of the river, the *Phragmites* give way in places to hightide bush and *Spartina* grasses. To the east sits Straddle Point, and farther along, to the west,

a boatyard.



Muskrat



Tupelo, blackgum, pepperidge tree



 $Red\ maple$



White oak



Black oak



Pitch pine



High tide bush



Poison ivy



 $Common\ cattail$



Phragmites



Spartina



Swamp azalea



Marsh mallow



Painted turtles

narrow Rose's Creek. Farther south on the east side you will come to the more navigable Big Fish Creek, which ends at the Refuge's impoundment (area closed to public entry). Past East Cove and then West Cove is narrow Little Fish Creek, just to the north of Sandy Point. Look for gulls and cormorants, congregating on the water's edge. Farther south, on the opposite side of the river, juts Long Point, beyond which is the Great South Bay.

Identification Guide

Plants

Tupelo, blackgum, pepperidge tree – branches at 90° angles; first to turn red in late summer

Red maple – freshwater indicator species; "palmate" leaves turn red in fall

White oak – rounded lobes on leaves; smooth-ish white bark

Black oak – pointy leaves and rougher, darker trunk

Pitch pine – scraggly-looking, yellow-green pine

High tide bush – grows on marsh in salty water; thick, fleshy leaves

Poison ivy – vine with three shiny leaves; turns red in fall; avoid touching

Wertheim **National Wildlife Refuge Montauk Highway Lower Carmans River** (Rte. 80) Long Island Railroad Robinson **Duck** Farm **Wertheim NWR Headquarters** Yaphank Creek White Oak **Nature Trail Section I** 2nd small bridge Middle reaches of the River -Island brackish and freshwater Squassux Landing up to the site of the old Southaven Carman Mill Commander Rochester's **Dock** Wertheim National Wildlife Long Island Expr Refuge Indian Landing Ñ **Squassux** Landing **Fishing** Access Site Shirley Newey's Canal 27 White Oak-**Straddle Point** Rose's Creek Indian Landing Trail Bellport Big Fish Creek **Great South Bay** East West Sandy **Section II** Cove Point Little Fish Creek Long River mouth — saltwater and **Point** brackish Great South Bay Domain of diamondback terrapin, killifish, willet, spartina, cormorant, mute swan, egrets, herons, gulls, terns, osprey, harrier, blue claw crab



Green heron

Common cattail – thick spiky, brown tops and flat, narrow leaves

Phragmites – most common reed; plumed tops; introduced, invasive plant

Spartina – low, green marsh grass; called "salt hay"; turns yellow-green in autumn

Swamp azalea – small and fragrant white flowers bloom in summer; grows in fresh water of upper reaches

Marsh mallow – pink, hibiscus-like flowers bloom in summer; grows in brackish water

Blue flag iris – blue-purple flowers bloom in summer; grows in fresh water

Canadian burnet – spiky white flower; compound leaves

Cardinal flower – bright red flower blooms in late summer; on the NYS protected list and is unlawful to pick

Goldenrod – yellow spray blooms in late summer; provides food for butterflies

Joe Pye weed – late blooming composite in aster family; pale pinkish flowers clustered at top

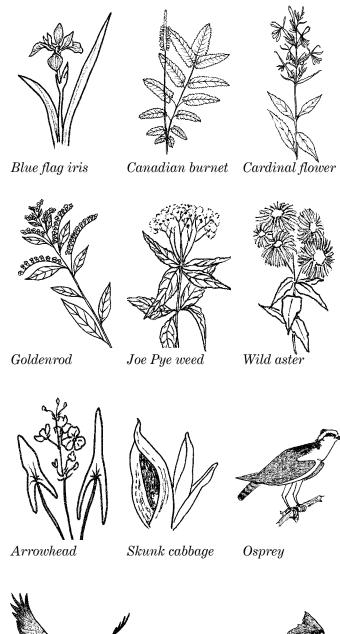
Wild aster – bright purple flowers seen in marshes in the fall

Arrowhead – freshwater plant; distinctive, arrow-shaped leaves

Skunk cabbage – large green leaves with yellow flower; grows in boggy places, appearing in March; melts its way through the snow



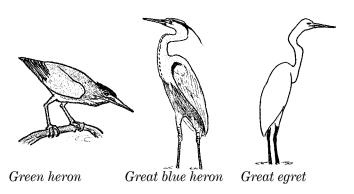
Nesting redwing blackbirds

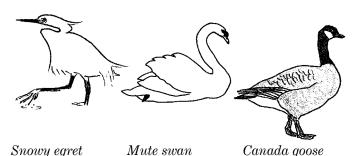




Northern harrier Common crow

Belted kingfisher







Cormorant

Bufflehead

Hooded merganser



Mallard

Black duck

Wood duck



Belted kingfisher

Birds

Osprey – fish-eating hawk; call a series of clear whistles

Northern harrier – also called marsh hawk; seen flying low over marshes; note white rump patch

Common crow – large and black; its smaller cousin, the fish crow, has a raspy voice

Belted kingfisher – blue-gray with crest; dives at fish; loud, rattling call

Green heron – small heron with greenish back and reddish neck and breast

Great blue heron – large, gray body, long legs; white face with black crest

Great egret – large, white wading bird; yellow feet and yellow bill

Snowy egret – smaller, with yellow feet and black bill

Mute swan – large, white bird; very aggressive, especially when breeding!

Canada goose – common; black neck and head, white on face

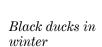
Cormorant – dark, diving bird with orange throat patch

Bufflehead – diving duck; male has large white patch on greenish head, dark wings

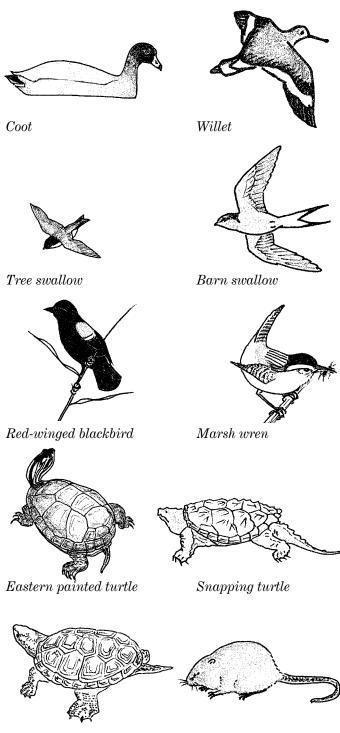
Hooded merganser – small diving duck; male has black and white crest on head

Mallard – common duck; male has green head, yellow bill; female brown

Black duck – larger than mallard; white patches under wings; fly straight up when startled







Diamond back terrapin

Muskrat

Wood duck – smaller than mallard; nests in tree cavity or box provided; male ornately colored

Coot – duck-sized bird, dark gray with black head, white bill and large, lobed feet; seen mostly in fall and winter

Willet – brown wading bird with distinctive black and white wing pattern

Tree swallow – small, dark green bird with white belly and slightly forked tail; eats mosquitoes

Barn swallow – small, brown bird with peachy colored breast; deeply forked tail; nests in buildings and under bridges

Red-winged blackbird – black bird with red shoulder patches on males; nests in *Phragmites*

Marsh wren – very small brown bird; nests in grasses and high tide bush; call a buzzing rattle

Miscellaneous

Eastern painted turtle – smoothbacked water turtle with striped face; suns on logs

Snapping turtle – large, dark water turtle with rough back

Diamond back terrapin – seen near mouth of river; gray body, dark shell

Muskrat – beaver-like mammal seen along shore or swimming; makes "V" shape in water

Carp – brackish to fresh water fish; seen near banks of river above Indian Landing

Snapper - immature bluefish

Northern water snake – sometimes seen swimming; black body with white undersides

Killifish – small, chubby minnow specially adapted to brackish water

Mosquito – important base of wetlands food chain both in larval and adult stages

Blue claw crab – males have blue claws; red when cooked!

Further Reading

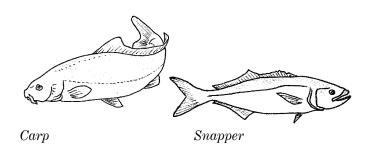
A Nature Journal, Dennis Puleston

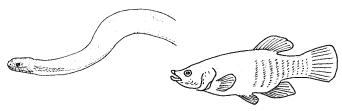
The Carmans River Story,
Pamela Borg and Elizabeth Shreeve

Many thanks go to our neighbors, Carin Clevidence and Jennifer Puleston, who lent their knowledge and love of the Carmans River, as well as their creative expertise, to this project. Their work truly made this guide a reality!









Northern water snake

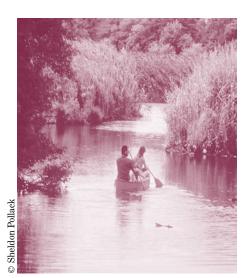
Killifish



Mosquito



Blue claw crab



Canoeing the Carmans