NORTHERN HARRIER

(MARSH HAWK)

When I was a young lad, the colloquial name for this bird was Marsh Hawk. Today this bird is called Northern Harrier in North America, <u>Circus hudsonius</u>, living throughout the Northern Hemisphere of North America. In Europe and Asia it is known as the Hen Harrier, <u>Circus cyaneus</u>. Some believe that these are two separate harrier species, rather than subspecies of each other as is generally accepted today. I tend to believe that North American harriers do not breed with European or Asian Harriers, and thus should be separate.



Northern Harrier, <u>Circus hudsonius</u>, female © www.hawkmountain.org

By definition, if individuals breed and produce viable offspring, then they are considered the same species. It is hard for me to accept that individuals living on two separate continents separated by oceans on either side could be considered to successfully breed with each other.

Normally, harriers breed throughout the northern hemisphere. In North America they breed in Canada and the northern parts of the US. Vermont Northern Harriers tend to move south in winter, and usually the ones that are here in January are ones that have moved down from Canada. With this warmer than usual winter we should be seeing Northern Harriers anytime.

Northern Harriers are sexually dimorphic, as can be seen by these two pictures, which means that the male plumage looks quite different from the plumage of the female. Sexual dimorphism is found in many species, either through looks such as color, or size, or behavioral characteristics that also can separate the sexes.

The male Northern Harrier is also known colloquially as the **Gray Ghost** because of its gray dorsal plumage and black wing tips, whereas the female looks mottled brown with some striping and bars with muted tan or buff on the breast like the picture. When trying to determine whether you are looking at a harrier or hawk look for the white band above the tail, called the rump. The white rump is a dead give-away for a Northern Harrier.



Northern Harrier, <u>Circus hudsonius</u>, Gray Ghost © Dave John

Before we moved to Middlebury I had only seen the Gray Ghost maybe two or three times over 50 years. Here at EastView I have seen the Gray Ghost approximately 4-5 times a year for the past three years. This is very significant in my mind, and is due to the very large meadow, marsh and fields we have in back of Deer Meadow Drive.

Male Northern Harriers are polygamous. They will mate with more than one female. Although they can mate with as many as 5 females during one nesting cycle, most mate with only one female. While the female incubates her eggs and broods the chicks, the male is responsible for finding food and bringing it to her.

Harrier diet is primarily small mammals, such as voles and mice, although they will take small birds if the opportunity presents itself. One of the reasons we see harriers flying low over our meadow and fields is that they are looking for voles and mice. One of the ways owls and raptors are able to search for rodents in grassy fields or pastureland is that rodents leave urine trails. These urine trails allow the rodent to find its way back to its burrow or nest. It is called chemical communication. Urine also is detectable with an ultraviolet sensor, and some predators have that ability to detect these urine trails. There will be more about this hunting technique by predators in a later Nature Notes.

Bird banding (the capturing and attaching a metal numbered band to the leg) records show the oldest Northern Harrier in North America as 15 years 4 months, as it was captured in Quebec at 4 months of age. Not bad for an organism living outdoors in our environment. That means that harrier ate a lot of mice and voles!

MEADOW VOLE



Meadow Vole, <u>Microtus</u> <u>pennsylvanicus</u> © John White

Holes in the soil of your garden, tunnels around plants and uprooted plant stems, small tiny tracks in the snow or a well worn path from one tunnel to another hole, all represent the living and feeding area of <u>Microtus pennsylvanicus</u>, the Meadow Vole, also known incorrectly as Field Mouse or Meadow Mouse.

To be accurate, a vole is different from a mouse. A vole and a mouse are both certainly rodents; but a vole has a small chunky body with a short tail, short ears and small eyes in comparison to a mouse. A mouse has large ears, long tail, and larger eyes. There are other differences, but the fact that a vole is not visibly a mouse because of its short tail, all dark color, usually dark brown to black, roundish head with small ears and eyes, it shouldn't be mistaken for a mouse. Voles are evolutionarily linked more to lemmings and muskrats than mice.

The Meadow Vole genus, <u>Microtus</u>, has a very wide distribution throughout North America. You can find <u>Microtus</u> from the east coast including most of Canada to the northwest coast of North America extending to Alaska and south to Georgia and west to Wyoming. Certainly, a wide range for this small, industrious and very prolific rodent.

Voles live in grasslands, moist meadows, and gardens or wherever there is habitat that fits. As can be seen by their range, <u>Microtus</u> is the most extensive compared to other rodents. Unbeknownst to the designers of EastView it was decided to place our community in prime Meadow Vole country; some of us have removed clay and substituted rich friable soil, with many garden perennials, shrubs and trees, which unfortunately appeal to voles.

If you are a Meadow Vole, you love gardens! For a gardener, Meadow Voles are a problem! We invade their territory, improve the soil and plant bulbs and perennials and wonder why we are outraged by Meadow Voles having the gaul to say "thank you very much, we'll just move right back in"!

What to do?

We can set traps and discard the bodies; we can leave well enough alone, replant and hope a hawk or owl will find the voles during the evening; or we can find some other more poisonous and environmentally disastrous methods to diminish their population in our gardens.

There are many predators that look upon Meadow Voles as fodder for their pallet, a tasty meal or treat. The ones we have around us here at EastView are Red Fox, Eastern Coyote, Striped Skunk, Raccoon, Common Crow, owls, hawks, harriers, herons, snakes, just to name a few of about 20 animals considered predators of Meadow Voles.

Since I like gardening and wildlife, I personally will take the second method of control by leaving well enough alone. Will I be affected, oh yes – Meadow Voles have decided that the gardens on Deer Meadow Drive are just right to spend the winter. Come spring I will dig up their tunnels, cultivate the garden area making it more difficult for the voles to make viable living quarters. Besides spring-cleaning the garden and cultivation, I will replant the same or new plants and try to maintain a status quo with the Meadow Voles hoping an owl will find them between now and next winter. Will that be successful?

Depends! All I know is that Meadow Voles have been in my backyard ever since we moved here and they are more prevalent during the winter and early spring than during the summer. Does this method represent a cost to me? Yes, but I would rather try and find a way to share my gardens than to use methods that I feel are deleterious to other wildlife.

INVASIVE ORGANISMS



Common Buckthorn, Rhamnus cathartica © Janet and Phil.(CCbyNC-ND)

A note about invasive organisms; an invasive organism is invasive when it is introduced into an area where it has no natural competitors, enemies or control mechanisms to limit its population growth. For example, when Europeans colonized North and South America they brought with them plants, bugs and mammals, either on purpose or as hitchhikers that were not known in North or South America. Consequently, without natural control mechanisms, some of them have grown or have become overpopulated (no diseases or natural enemies) with little control for their population. When these organisms outcompete native organisms and take over an ecosystem they also change the ecology of the area over time. Why should we care? We should care because as these organisms disrupt the ecosystem they are also disrupting the very livelihood of other organisms that depend on the native ones. This causes a ripple affect with deleterious consequences to plants, bugs and animals that are affected in the ecosystem. Each organism in a normal system is dependent on each other, either for food, shelter or various interactions that help each other survive. Bring in an invasive and the normal organisms' relationships diminish and eventually disappear over time.

We as individuals, plus state, and federal agencies, spend a tremendous amount of time, money and effort to try and check these invasive organisms. Without this effort being made I hate to contemplate what our forests, ponds, agricultural fields and organism populations would look like.

Weather Tidbits

March 1-14, 2016

All Measurements taken at solar noon (1230 EST).

PRECIPITATION

Total Precipitation: 26.4 mm or 1.03 inches

Precipitation includes rain and snow melt.

Snow Days: 1

Snowfall for March 1-14: TR mm or TR inches

Overcast Days: 4

WIND

Highest wind gust: March 2, 28 MPH, Direction: North

Average Wind speed for March: 1.4 mph,

Dominate Wind Direction: North

Days w/wind gusts 20-30 MPH: 6

Days w/wind gusts 30 MPH: 0

TEMPERATURE

Mean Temp: 1.7 C⁰/35.1°F

High Temp: 27.7 C⁰/82.0°F

Low Temp: -15.7 C⁰/3.7°F

DAYS OF:

Min. Temp. 0.0 C⁰/32⁰F: 8 days

Max. Temp. 0.0 C⁰/32⁰F: 4 days