

Wild in the Garden Again: An Update on Habitat and Wildlife at the FWG : 2003

by Christine Hanrahan

Introduction

It has been four years since I wrote about the Fletcher Wildlife Garden (FWG) and the wildlife found there (Hanrahan 1999). The garden is constantly evolving, both naturally and through careful 'management', and this is reflected in the new species and shifting numbers using the site. With these and other changes taking place, it seemed the time was ripe for an update.



Background

For those not familiar with the FWG a quick summary follows. The garden, a project of the Ottawa Field Naturalists' Club (OFNC), is run by a committee which reports to the OFNC Council. An active team of energetic volunteers works on all aspects of the garden, but particularly the Backyard Garden which in many respects is the public face of the OFNC. Conceived as a 'Wildlife '87' project by Judy and Peter Hall and Jeff Harrison, to promote the principles of gardening for wildlife, in harmony with nature, using native plants and no chemicals, the idea was promoted by the club's Conservation Committee.

After considering various locations a 7- hectare site on the Central Experimental Farm, east of

Prince of Wales Dr. and south of the Dominion Arboretum was chosen (see map, *fig. 1*). In 1990 the Ottawa Field Naturalists' Club formed an agreement with Agriculture and Agri-food Canada to take over the site and work began on what would become a major transformation from mostly mowed grass to an oasis for wildlife of hedgerows, thickets, and open areas full of tall grass and wildflowers (Hall 1990). A pond was dug, the small ash woodlot was allowed to develop an understorey, a new woodlot and a hedgerow were planted, an open area was allowed to evolve as old field habitat and a demonstration backyard garden was created behind Building 138 which is now our Interpretive Centre, and a home for OFNC activities.



Interpretive Centre, 2003

For more about the FWG please visit the website at www.ofnc.ca where there is a wealth of information including descriptions of the various habitats, copies of the quarterly FWG Newsletter (*What's Up at the Fletcher Wildlife Garden*) and a virtual tour of the garden. A brochure about the FWG can be picked up from the box in front of the Interpretive Centre. Other brochures on birds, butterflies, wildflowers and the Backyard Garden are available from the Interpretive Centre which is usually open Friday mornings, or during

the summer five days a week when a staff person is on hand.

The garden as you see it today is the result of both natural succession and hard work by dedicated volunteers, work which is and will be ongoing. This year, 2003, the garden celebrates its 13th year, not really a very long time in the great scheme of things, and yet tremendous changes have occurred. We are proud of the shelter it provides to wildlife and the solace it gives to urban-weary humans, and we anticipate the continued evolution of the garden with pleasure.

UPDATES

Habitat Changes

The last four years have seen important transformations in the garden. A section of the new woodlot planted in the early days of the project is now one of the most enchanting places there with tall trees and an understorey of shrubs and wildflowers. It links up with the southwest section of the now mature hedgerow forming a dense and protected habitat for birds and small mammals.

The birch grove has metamorphosed into a significant copse of tall trees; the several sumac thickets have spread considerably; and the area directly south of the ash woodlot contains a fairly thick stand of red osier dogwoods which provide nest sites and food for many bird species. The ravine continues to become more densely vegetated and is still the best place in the garden to look for birds. Patches of common milkweed have increased and Queen Anne's lace, New

England aster and several species of goldenrod have spread abundantly attracting various insects including a variety of butterflies.

Many of the changes that have occurred are a result of natural succession. However, the garden is far from a hands-off project. There will always be a degree of 'management' in many areas. The old field, for example, will be one of more heavily managed sites because periodic mowing will be necessary if we are to retain it at a very early level of succession to show the characteristics and values of old field habitat. This site was mowed in the fall of 2002 after about 6 years of growth. In future we will most likely cut every two to three years or try strip mowing which involves alternating strips of vegetation mowed at different times.

The pond too is subject to management, primarily to control exotic plants such as flowering rush. There has also been discussion about controlling the water flow (possibly via a small dam) so

that there is adequate water during the summer months. The pond is one of our great successes, despite the growth of invasive aquatic plants, for it has attracted a wealth of creatures from insects to mammals to birds to herps. Looking at the pond now, who would ever know it was human-created.



Green Frog

Planting, planting and more planting

Thanks to various grants and the work of many volunteers, hundreds of shrubs, trees and herbaceous plants have been planted around the garden. The ash woodlot has absorbed many of the trees, both in the woodlot itself to replace the scores of buckthorn taken out over the last couple of years and in the semi-circle to the west of the woods. More shrubs have gone into the thickets around the old field where significant numbers of buckthorn, some very large, were removed. Of course the Backyard Garden is always evolving too with many new plants. Needless to say, all of the new vegetation is native to this region.

Invaders in the garden

Much of the planting has been a response to control of some of the more insidious invasive plants which have seeded themselves on the site and which are being removed and replaced with native species. The two most aggressive non-native plants at FWG are buckthorn and swallow-wort (or dog-strangling vine). Starting in the summer of 2001 scores of buckthorn shrubs were cut or uprooted, particularly from the thickets around the old field site where many native shrubs

were planted in their stead (Garland 2001). Buckthorn removal continued in 2002 with most of the mature shrubs and seedling rooted out from the ash woodlot and dozens of native tree species planted to fill in the gaps. Where removal of very large buckthorns would create a loss of nest sites and leave a gaping hole in the landscape, girdling was done instead. One prime example of this is the enormous buckthorn on the north side of the pond which not only provides cover and shade along the north slope and is well used by birds for perching, especially in summer, but this winter (2002-2003) sports three large red squirrel 'nests'.

In 2001 Naomi Cappucino, a biology professor at Carleton University, along with several of her students, began studying ways of controlling the seriously invasive swallowwort by setting up a series of study plots at the FWG (those small orange flags you see indicate some of her plots). So far no solution has emerged but work is ongoing (Cappucino 2001).

Another serious invasive plant at FWG is garlic mustard which for the most part is confined to the ash woodlot (Garland 2001) and where volunteers have recently had some success in reducing the overall growth.

Birds

Bill Holland began collecting data on birds of the FWG and the area immediately adjacent when the project got underway in 1990 (Hall 1990). Bill logged close to 100 species by the time of his death in late 1993, and consequently, new species are added slowly. Beginning in 1994, I took over bird observations for FWG concentrating more on nesting data, but new species have been found nonetheless. Our first bird brochure in 1996, *Birds of the Fletcher Wildlife Garden*, listed 103 species, and by the most recent update in January 2002 the list stood at 117 species. Since then two more species have been added for a total of 119 species, which is not bad for a small patch of Ottawa greenspace.



Tree Swallow

We know that numbers of birds increase and decrease as their preferred habitat succumbs to succession or some other change. The habitat modifications noted above have definitely had an impact on birds found at FWG, mostly on the positive side. Of course, if the entire area were to become wooded we would lose many of the birds that nest in edges and open areas. One task for the spring of 2003 is to 'de-tree' the south slope of the pond where numerous swallow boxes are situated. Once the trees reach a certain height the swallows will be deterred from using their nest boxes, so we are planning to transplant as many trees as possible to the western portion of the new woods and retain the nest box area as open land - which will mean uprooting any trees that self-seed there. Nest boxes from other parts of the new woods will be moved to open areas.

Nesting birds- the story so far

One of the best ways to determine the attractiveness of a site to birds is by noting how many nest there, since for many species certain conditions must be met before nesting can take place. Birds need food, water, shelter and safe, protected nest sites. If numbers of pairs nesting is one of the yardsticks by which to measure the success of a habitat creation project, then the FWG can be said to be successful. Numerous nesting birds covering some twenty-six species are confirmed as having nested in the garden. Three more species have probably nested but confirmation is lacking.

Nesting Birds at FWG

Green Heron	Gray Catbird
Mallard	Brown Thrasher
American Kestrel	European Starling
Killdeer	Yellow Warbler
Mourning Dove	American Redstart
Downy Woodpecker	Song Sparrow
Eastern Kingbird	Northern Cardinal
Warbling Vireo	Red-winged Blackbird
American Crow	Brown-headed Cowbird
Tree Swallow	Baltimore Oriole
Barn Swallow	House Finch
Black-capped Chickadee	American Goldfinch
American Robin	House Sparrow

Tree swallow numbers increased dramatically in 2001 (up from 7 pairs in 1999) and nearly every swallow box was taken over by this species, a trend which continued in 2002 and which means that over 20 pairs of tree swallows are now using the FWG. This is in contrast to previous years when house sparrows occupied at least one-third of the boxes. We're planning to erect more swallow boxes this year and expect that they will be 'snapped up' in no time. As were the two which were claimed by swallows within hours of their placement by Dale Crook in the old field in 2001!



House Sparrow

Other species which have increased in terms of nesting pairs are yellow warblers, american robins, black-capped chickadees, baltimore orioles, american goldfinches and red-winged blackbirds. Gray catbird, northern cardinal and song sparrow apparently suffered a dip in 2002, no doubt due to extensive removal of buckthorn leaving the thickets where these species primarily nested quite sparse in places. However, once the elderberry and other replacement shrubs take hold growth will be quick and in about 5 or 6 years the thickets should begin to fill in creating a safe nest area once more. In the meantime, other thickets continue to develop and will quickly provide new nest sites.

New nesting species

In the garden we recorded brown thrasher, american redstart, and most exciting of all, a pair of green herons who raised 4 young in the summer of 2002, and were first found by Sandy Lang. New nesting species adjacent to the FWG were merlins in 2001 and 2002 (we're hoping they choose the garden in 2003!), and cooper's hawks.

New bird species in the garden

Our first new species in quite awhile, and 117th on our list, was found in November 2001 when a beautiful grey-phase gyrfalcon lingered for a day or so. This was almost certainly the same bird found earlier on the farm. No sooner had our updated (2002) bird brochure been printed in large quantities when Dale Crook discovered another new species, a woodcock (#118), in the ravine behind the Interpretive Centre. In the fall of 2002 I found four rusty blackbirds near the old field, for the 119th species on our list.

Other

Birders visiting the FWG should extend their tour to include the Arboretum and the farm fields. Viewed from the Arboretum, the Rideau Canal often has a selection of interesting birds, especially in spring and fall when common loons, pied-billed grebes, common and hooded mergansers, lapland longspurs, and various shorebirds can be found, the latter usually when the muddy shoreline has been exposed by lowered water levels.. A couple of winters ago a barred owl hung out near the Neatby Building on the farm, and in the fall of 2002 a peregrine falcon stayed around the same area for a few days helping demolish the pigeon population. In January 2003 a very pale great horned owl, possibly the *subarcticus* race, was found near the greenhouses on the farm. A great horned owl was also reported from the FWG earlier in the same month.

Butterflies and other insects

When the *Butterflies of the Fletcher Wildlife Garden* brochure was compiled in 1998, 33 species of butterflies had been observed which, remarkably, is about one-third of all the butterflies found in the Ottawa district. Since then, some interesting butterflies have been added to our FWG list.

New Butterflies in the Garden

In the summer of 1999 Don Lafontaine found a bronze copper, a species both local and uncommon according to the *Butterflies of Canada* (1998). Eastern tailed blue is a rare species in eastern Ontario, but in July of 2000 Peter Hall found two in the garden, and relocated them again in late August. At first glance it would be easy to dismiss them as one of the more common blues, but they are quite different and the distinctive ‘tail’ gives them away. Also recorded in 2000 and new for the garden was a little wood satyr. On Canada Day in 2002, Peter Hall discovered our fourth new species for the garden, a tawny-edged skipper, bringing the total number of butterflies found at FWG to 37 species.



Little Wood Satyr

A really exciting observation was made on September 17, 2002 by Maxim Larivee who found a very fresh fiery skipper in the Ornamental Gardens, a species new to the Ottawa district. A few hundred metres or so further south and east and we'd have been adding this gorgeous butterfly to our FWG list! Keep your eyes peeled this summer

We continue to find good numbers of most of the common overwintering butterflies such as mourning cloak and milbert's tortoiseshell. On warm days in very early spring, or late fall it is not unusual to find these butterflies out and about. One warm mid-October day in 2000, I watched eight mourning cloaks fly out one by one, from a fruit tree in the ravine and wing their way across to the other side. The summer of 2001 was an exceptional one for anglewings throughout the region, and the FWG had its fair share of these exquisite butterflies, in particular question marks and red admirals.

Other insects

In the fall of 2001 swarms of ladybeetles were so plentiful as to garner the attention of people other than naturalists and gardeners. It turned out that these abundant bugs were the Asian



Asian Lady Beetle

ladybeetle which according to information posted by Henri Goulet on the ECORC web site, were accidentally introduced into North America (in Louisiana) in 1988, reaching Canada in 1995. We found hundreds of these critters all over the garden and around the Interpretive Centre, and it was not unusual to have half a dozen land on one's body at any given time. Apparently they eat aphids, as do their native counterpart, but they also eat the larvae of other ladybeetle species which is not so good. At any rate, last fall, 2002, few if any of these insects were noticed.

The garden attracts abundant insects and spiders and we are familiar only with the most recognizable: the cecropia moths, ctenucha moths, praying mantis, milkweed bugs and beetles, bees, wasps of various species, dragonflies and damselflies, cicadas, and other common creatures. We would really like to have someone who knows insects well do a survey for us of what we have (see under **How you can help** below).

Mammals

Our mammal population at the garden seems to be undergoing some interesting changes. Seven or eight years ago there were quite a few groundhogs living at the FWG, but over the past three years their numbers have declined to such an extent that they are now seldom seen. In the spring of 2002 I saw perhaps 3 groundhogs at different locations around the garden, but by mid-summer I realized that I hadn't seen any for some time. This seemed to be the story around the entire farm - they were there in spring but mostly gone by summer. Dogs certainly kill some of these animals, and there may be other reasons for their absence from parts of the farm (they are unwelcome), but it is quite likely that the burgeoning fox population has more to do with their reduced numbers. Foxes have denned on the farm for years and there is evidence that they have at one time, and may again, use the FWG as a natal site. At any rate, the main den site produced a litter of five pups in 2002 which is a fairly sizeable family. Over the years that I have been noting them the average number of pups in a litter seems to be three. During 2002 these beautiful animals were much in evidence around FWG and it is obvious that the garden has become an increasingly attractive hunting ground for them. Fox tracks are everywhere in the fresh snow and scats are common, especially in the middle of trails! One day the backyard garden crew were on their coffee break when someone spotted a fox near the bird feeder. Much excitement ensued as people crowded around the window to watch the fox half-climb the elderberry shrub and pull a squirrel to its quick end. The ravine is one of the best places to watch for foxes in winter since it

a resting spot as well as a conduit from the farm to the rest of the garden, but please! don't try to track them there! Watch them from above. Winter is a cruel season for animals and they need to conserve energy for the difficult task of finding food.

Cottontail rabbits were a novelty at FWG just half a dozen years ago but their numbers quickly burgeoned, as rabbit numbers will if nature runs its course! However, their numbers too seem to have dipped lately, no doubt primarily due to increased fox predation.



Fox in the Backyard Garden at FWG, Photo by David Hobden

As for the short-tailed weasel we first saw in May 1998 with its family of young (Hanrahan 1999), only fleeting and infrequent sightings of this mammal have been recorded since then.

New species in the garden

Two new mammals for the FWG were found. In November 2001 a young beaver found its way to the pond for awhile, but whether it was the same beaver noted the following spring on April 22nd in 2002 - who knows? This time the animal stayed around for two or three days, always on the north side of the pond, which was wise because that slope is difficult for dogs and people to access and it was able to stay relatively well hidden. A large den on that same slope that has been there for several years showed signs of recent activity and I did wonder if the beaver had overwintered there. As most people know, beaver will den in banks as well as in the more familiar lodges. Whatever the story, he disappeared and as far as we could tell, none showed up this past fall. We've certainly not seen any signs of beaver activity.

In February 2002 I was idly looking out the window of the centre into the ravine when I saw a deer sitting on the south slope. I thought at first I was seeing things, but no, the animal was real and very much alive. A conservation officer was contacted and later told us that a deer had been living for the past six months in the vicinity of Fisher and Meadowlands. He reckoned 'our' deer was probably the same animal and if so, the garden must have seemed like paradise after the suburban nightmare. Although I never saw it again, the animal was reported several times over the spring and then ... nothing. I hope it managed to make its way to somewhere safe.

Reptiles and Amphibians

During the summer of 1999 at least four painted turtles and a blanding's turtle shared the pond, as they had for a couple of years. However, in recent years we've seen only one or two painted turtles, the occasional lone snapping turtle looking for a suitable egg-laying spot, and no blanding's. Blanding's are notorious wanderers and no doubt the one that graced our pond for a few years, if it survived, up and left one spring day looking for more of its own kind.

Wood frogs, leopard frogs and american toads continue to live and breed in the pond, but in 2002 at least, *seemed* to be far fewer in number. No real surveys have been done so this comment is

not backed up by data! However, with a family of hungry green herons hanging around with an appetite for tadpoles

How you can help

Volunteer

The largest group of FWG volunteers meets on Friday mornings to work on the Backyard Garden. This is a good opportunity to get some hands-on experience in gardening with native plants as well as helping with the many tasks that always need doing. For more information about the BYG activities contact David Hobden at 521-4145 or e-mail dhobden@achilles.net.

Volunteers are also needed to staff the centre on Sunday mornings from approximately mid-May to mid-Oct. This can be a great way to spend a few hours, meeting visitors, browsing through all the great reference material in the FWG library when things are quiet, watching the birds and other critters around the centre. There are also many other opportunities to help out. If interested, contact Sandy Garland at 730-0714, or email sgarland@achilles.net or David Hobden.

Recording observations

In addition to keeping track of all species at FWG, we want to discover what all these critters are doing! We're keen to find out what plants they eat (seeds, fruit, leaves, twigs...), where they nest, what flowers attract which insects, which plants host which larvae, where the paper wasp nests are hung, and ... well, you get the idea. If you'd like to spare a few hours every few weeks to make regular observations, please contact the FWG at 234-6767 and leave a message. We'd especially like to hear from anyone familiar with spiders and insects other than butterflies who would be willing to compile a preliminary list for us. Email me at vanessa@magma.ca or call the FWG at the above number if you are interested

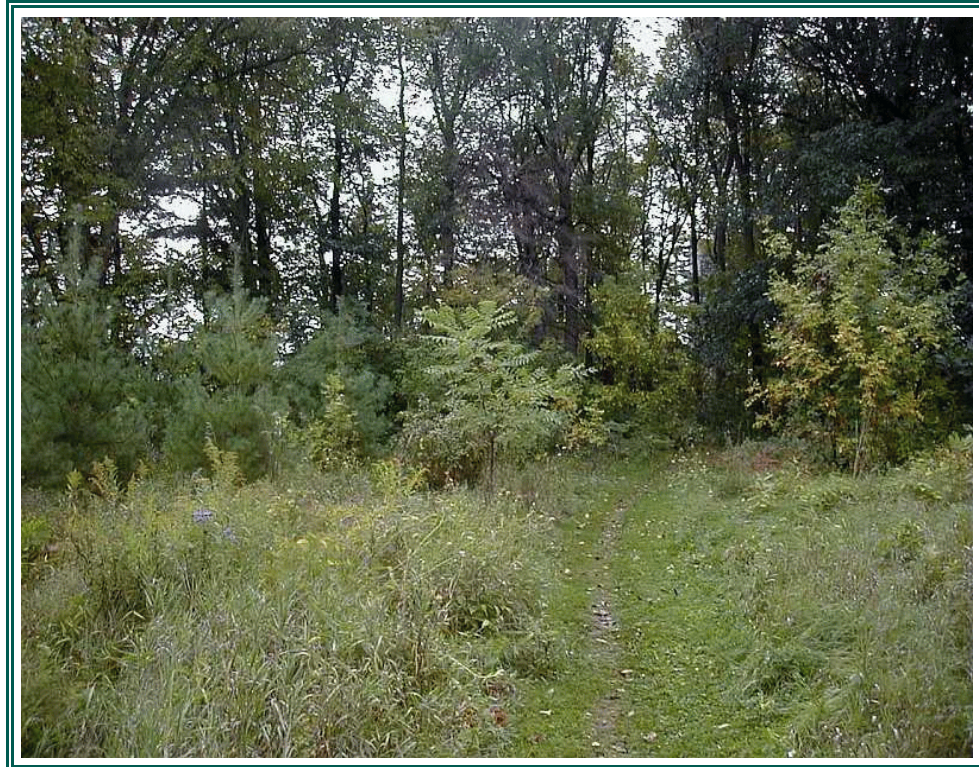
Acknowledgments Thanks are due, first and foremost, to all the volunteers whose work on the garden, past and present, means that we have this wonderful place to visit and cherish. Without their dedication there wouldn't be an FWG. I'd also like to thank David Hobden for use of his photo.



Location of FWG

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Ash Woods, 2003