

The Blazing Star



NEWSLETTER OF THE NORTH AMERICAN NATIVE PLANT SOCIETY

Native Plant to Know

Evening Primrose

Oenothera biennis

by Lorraine Brown

When I first seeded my Ontario tallgrass prairie in 2000, I used a seed mix that included Evening Primrose (*Oenothera biennis*). Most plants from the mix came up – first Black-eyed Susan (*Rudbeckia hirta*), then Wild Bergamot (*Monarda fistulosa*), Woodland Sunflower (*Helianthus divaricatus*), Virginia Mountain-mint (*Pycnanthemum virginianum*), and finally, native grasses. But the Evening Primrose did not appear.

Over the past few years I have been increasing the size of the prairie. In 2007, in an effort to have all the original species in the new areas, I grew Evening Primrose with seed from the North American Native Plant Society Seed Exchange. The plant grew easily, forming large, ground-hugging rosettes at first, then tall stalks with their distinctive yellow flowers. All of this growth took place in the first year, not in two years, as I would have expected from a biennial plant. In fall 2008 I collected seed from the dried pods of about 20 plants, and was amazed at their productivity. The seeds are extremely fine, and each plant produces thousands of them.

I added the seeds to the mix for the new prairie I would be planting in spring 2009, blissfully imagining all the species putting down roots and

appearing in the same succession I had watched unfold in the original prairie. Instead, that spring, one species overtook the new prairie area.

At first I didn't recognize the rosettes, so unprepared was I for this turn of events. Only by going through the list of plants in the mix, and eliminating them one by one, did it finally dawn on me that the rosettes were Evening Primrose. The red splotches on the stems enabled me to confirm the species.

All summer (2009) I watched as the Evening Primrose grew and then bloomed in a sea of yellow. I cut off the flowers over a third of the area and mowed down the rest, hoping to bring things into balance. Early this spring I saw new primrose rosettes forming, but I also saw lots of the hairy leaves of Black-eyed Susan, and the deeply indented leaves of Grey-headed Coneflower (*Ratibida pinnata*) here and there. As summer arrived, all those plants, especially *Rudbeckia*, promised a great new prairie. As of this writing (July 5, 2010), there is no Evening Primrose in sight, but I'll be watching for their tall flower heads later in the growing season.

In its natural habitat Evening Primrose grows in poor, rocky soil such as roadsides and ditches. It is found throughout North America east

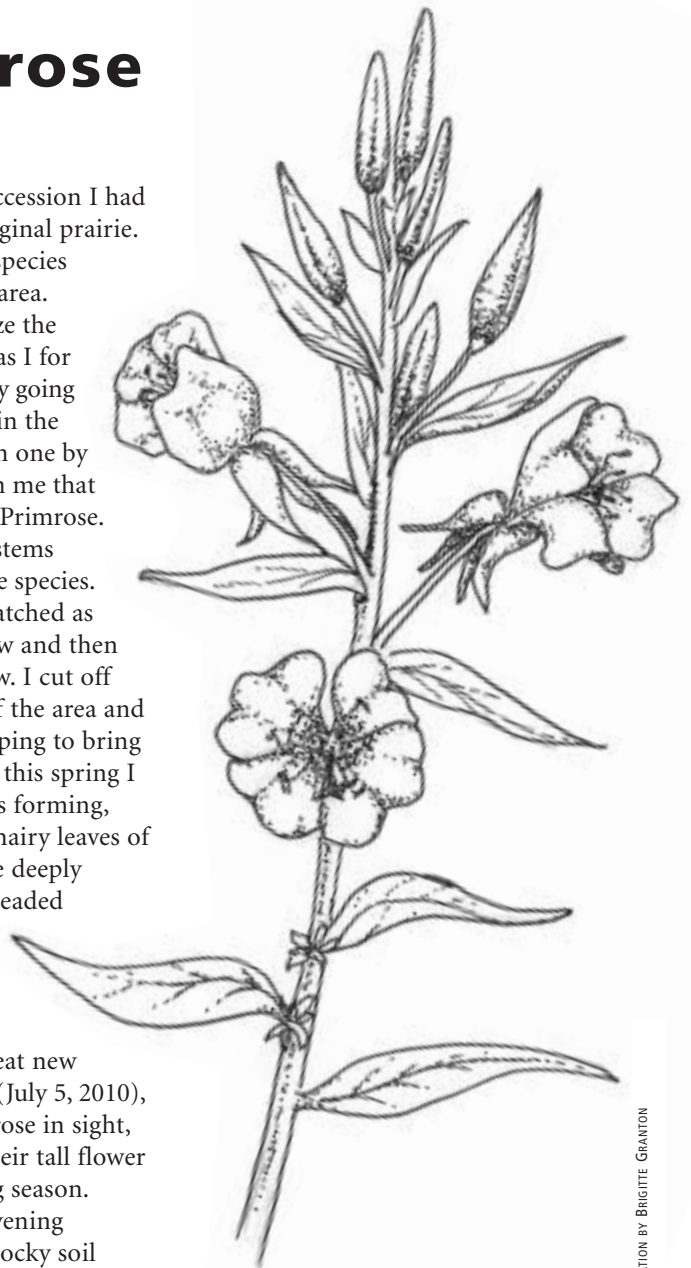


ILLUSTRATION BY BRIGITTE GRANTON

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The *Blazing Star* is . . .

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In January, the NANPS Annual Plant Sale seemed a long way away. But planning was already underway and I was sending out ads to various magazines. Based on our previous year's experience, I wrote that we would have "over 400 species of wildflowers, shrubs, trees, vines, ferns, grasses and sedges". In the end, over 430 different species were available at the NANPS plant sale, locally sourced within 200 kilometres or 120 miles (where else can you find this variety in one place?). Over 5,000 plants found homes in GTA gardens.

The plant sale is NANPS major fundraiser and supports all our other endeavours. The largest cast of volunteers is to be found here. This is the place to talk with like-minded people about native plants... and there is always someone who knows something you don't! This year there were 70 volunteers who came to set up at the Markham Civic Centre, or to staff a table on sale day, and some came both days. Many contributed in other ways in the weeks and months preceding the event, and afterwards. Each task is important – from designing promotional materials to distributing flyers to deciding how many plants we need to driving and unloading the delivery trucks to advising customers.... Other tasks are too numerous to name.

Our volunteers' other contributions include some pretty darn amazing things such as organizing the Seed Exchange, the Speakers' Series, excursions and plant rescues, writing for *The Blazing Star* and *The Local Scoop*, updating our website or maintaining our conservation properties. Volunteers joined NANPS



A sprinkling of this year's NANPS Plant Sale volunteers: Janice Keil, Deb Dale, Monica Dennis, Miriam Henriques, Janet Harrison, Alice Kong and in front, Alexandrina Canto-Thaler

Directors in April, May & June in Shining Tree Woods, removing garlic mustard, enjoying the woods and the huge diversity of native flora & fauna, visiting a local native plant nursery.

Our volunteers have helped renew the viability of NANPS, increasing our visibility and relevance, especially at events such as Canada Blooms. **Thanks to all our volunteers**, the North American Native Plant Society remains a vibrant organization.

In NANPS 25th Anniversary Year, we encourage all our members to take up the **25 for 25 Challenge**, and donate at least 25 hours of your time towards NANPS Mission: the study, conservation, cultivation and restoration of North America's native flora. If you can contribute towards our invasive plant pulls, the fall AGM or Seed Exchange, it would be much appreciated (contact volunteer@nanps.org). Or submit an article, photos or artwork to our newsletter (e-mail editor@nanps.org) or website, or organize conservation events in your neighbourhood. Whatever you do to support the preservation of native plants and ecosystems contributes to a healthier environment. Many, many thanks to all of you for your dedication.

*Alice Kong, Plant Sale Coordinator &
Gerry Stephenson, Volunteer Coordinator*

NANPS Annual General Meeting & Plant Sale

SATURDAY, OCTOBER 2ND, NOON TO 4PM
MARKHAM CIVIC CENTRE
101 TOWN CENTRE BLVD (HWY 7 AT WARDEN AVENUE)
MARKHAM, ONTARIO

Keynote speaker Dr. Bridget Stutchbury, author of *The Bird Detective*.
Presentation of Paul McGaw Memorial Conservation, NANPS Garden and
Volunteer Awards. **Please pot up surplus native plants from your garden for sale at the AGM.** Visit www.nanps.org

NANPS EVENTS

PRAIRIE TOUR SATURDAY, SEPTEMBER 25TH

NANPS fall excursion will be a full-day carpool tour of three significant prairie sites in Northumberland County. This will be a splendid opportunity to enjoy the beauty of these rare and delicate ecosystems and to learn about the challenges of preserving and extending prairies from local experts.

PHOTOGRAPH BY JOHN OYSTON



Red Cloud Cemetery

Red Cloud Cemetery is a small prairie remnant in a historical burying ground, protected by local volunteers.

Alderville Black Oak Savanna (www.aldervillesavanna.ca) is a large prairie remnant on First Nations land. The First Nations people recognised the importance of the site and have protected it from development (such as a gravel pit). It is maintained using controlled burns and it is being extended using plants grown from seeds collected on the site.

Oak Hills Farm Prairie and Arboretum (www.oakhillsfarm.ca) is a new 1.2-hectare (three-acre) prairie, planted in May 2008 to re-create some of the long lost prairie habitat.

Tickets are \$15 for members and \$25 for non-members. We will be carpooling so if you can offer a ride or need a ride please let us know. Contact John Oyston for more

WANTED: Seed Donors

NANPS Annual Seed Exchange awaits your contributions! Experienced seed collectors and novices, we urge you to collect seeds from native species for exchange with other keen gardeners. You will be contributing to the restoration of our native flora and the ecosystems on which our native insects, birds and mammals thrive.

Send your seeds, separated by species and identified with the source/parentage, to NANPS, Box 84, Stn D, Etobicoke, ON M9A 4X1, or bring them at the NANPS AGM.

Do you have questions about the proper way to collect seeds? Contact seeds@nanps.org.

information by e-mailing excursions@nanps.org or calling 416-972-1292. Or leave a voicemail message at 416-631-4438. Please buy your tickets asap so that we can arrange carpooling. Thank you!

SEED COLLECTION WORKSHOP

SATURDAY, OCTOBER 23RD, 9AM TO NOON
ROUGE VALLEY CONSERVATION CENTRE
SCARBOROUGH

Join us for a three-hour workshop led by Gavin Trevelyan covering collection ethics, techniques, timing, safety, seed storage and life cycles, and a seed collection walk. Participants will have the option of completing a mail-in test to obtain a certificate. Rain or shine – dress appropriately. \$20/members, \$30/non-members. www.nanps.org

SHINING TREE WOODS EXCURSION

NANPS will be returning to Shining Tree Woods in late October/November to root out garlic mustard rosettes and conduct a tree survey. Watch for details on the website. We are looking for volunteer drivers to lead carpools.



The advance order desk at NANPS 2010 Plant Sale



A child looking at the butterfly poster beside the bog display at NANPS plant sale.

PHOTOGRAPH BY STAN IMADA

PHOTOGRAPH BY STAN IMADA

Pella, Iowa's Indian Trail

by Stephen Johnson

In the belief that it was once used by Native Americans, I call this trail – and the forest fragment that envelops it – the Indian Trail. I like this small forest because of its dynamic spring and summer-long succession of native flowering plants and its plethora of autumn-appearing mycorrhizal mushrooms. Their presence indicates that certain fundamental ecological processes still function here. What's more, all of this is close to home within a state that is perhaps the most ecologically altered in the United States.

This trail, located four miles (six kilometers) outside of Pella, Iowa, is one of the attractions of that part of the Volksweg or People's Path (a walking and bicycle trail system) that connects Pella to the Lake Red Rock Reservoir in the central part of the state. Officially known as the North Overlook Nature Trail, it's a loop covering 1.1 miles (1.8 kilometres). The forest is bordered to the east by privately owned, but as yet undeveloped, forested hills with open understorey, and to the north, west and south by forested campgrounds and other recreational sites.

I first became acquainted with the Indian Trail 10 years ago on an excursion with my friend and frequent co-author Mary Stark, a professor of English. This forest is distinct from other local natural areas in that it represents one of the very few remaining intact open-understorey deciduous forests in the vicinity of Pella. Sadly, it is beginning to change as invasive trees, shrubs and potentially herbs move in from the south with the paved road and recreational development. Despite this, the forest still has distinct native plant diversity.

A typical oak and hickory forest, it is dominated by White and Northern Red Oaks (*Quercus alba* and *rubra*), and Shagbark and Bitternut Hickories (*Carya ovata* and *C. cordiformis*).

However, unlike other forests nearby, this woodland also has a prominent Basswood (*Tilia americana*) component.

The fairly uncrowded mid-canopy layer of oak and basswood saplings and bird-imported cherries (*Prunus* spp.) is complemented by subcanopy trees such as Slippery Elm (*Ulmus rubra*) and American Hazelnut (*Corylus americana*), a shrub layer of Wild Gooseberry (*Ribes missouriense*), and some scattered Buckbrush (*Symphoricarpos orbiculatus*).

One indication of this forest's health is the presence of several Northern Red and White Oak-associated

mycorrhizal mushroom species. In a fall 2008 survey I located Bitter Bolete (*Tylopilus felleus*) and Red-mouth Bolete (*Boletus subvelutipes*). There were many species of russula such as Blackening Brittlegill (*Russula nigricans*) and other species lacking common names such as the red-capped *Russula pulchra*, the fissured, green-capped *R. virescens* and the purple-capped *R. sericeonitens*. The most widespread mycorrhizal associates were the waxy cap

Hygrophorus subsalmonius and the Common Laccaria (*Laccaria laccata*). These mushroom species help both oak species take up critical nutrients such as nitrogen and phosphorus and even water during drought. In return the trees provide glucose from photosynthesis to the mushrooms. As autumn progresses, many of these mushrooms take on a swiss-cheese countenance as slugs perforate their caps. The slugs in turn become food for the most charming little slug-eating snake in the Midwest, the Midland Brown Snake.

Though some of these mushrooms can be colourful, wildflowers provide



Anemonella thalictroides (Rue Anemone)

PHOTOGRAPH BY STEPHEN JOHNSON

the more noticeable flecks of colour in this forest. A mustard-yellow stippling of the understorey is supplied by Yellow Violet (*Viola pubescens*). Variations on white come from a variety of species. The more interesting white flowers indicative of an eastern woodland understorey are Toothwort (*Dentaria laciniata*), Bloodroot (*Sanguinaria canadensis*), and Spring Beauty (*Claytonia virginica*). These species have seeds bearing a small fat body known as an eliasome designed to attract ants. Healthy populations of these plants indicate that healthy forest ecological processes involving native ant species are at work.

Dutchman's Breeches (*Dicentra cucullaria*) and Woodland Trout Lily (*Erythronium albidum*) are both infrequent but are especially fun to find when you consider that Pella was settled primarily by the Dutch. Together the flowers compose most of a traditional Dutch outfit. *Dicentra* obviously provides the pantaloons and the trout lily supplies the maiden's hat.

The rarest plant in the forest is the pearlescent mycotroph Indian Pipes (*Monotropa uniflora*), a childhood favourite of Emily Dickinson, according to Mary. Far more common are the coarse and waxy-flowered Mayapple (*Podophyllum peltatum*) and the grappling Common Bedstraw (*Gallium aparine*). The three most common and weedy members of the carrot family are found here in abundance. Honewort (*Cryptotaenia canadensis*) has an edible root. Sweet Cicely (*Osmorhiza claytoni*) is also of culinary and medicinal interest, but Sanicle (*Sanicula canadensis*) and Black Snakeroot (*S. marilandica*) are what botanist and author Charles B. Heiser calls some of the most annoying of weeds since the fruits are so hard to remove from clothing.



White Bellflower

The most distinct member of the spring flora in this forest is also one of the earliest. When the ground is clear of competition and the trees have no leaves, the forest floor is studded with pale to deep pink stipple which on close examination is Rue Anemone (*Anemonella thalictroides*). I haven't found this lovely plant in any other local forest fragment. In some years it is quite common at the north end of the Indian Trail forest and in others hard to find. It is restricted to the more open understorey areas.

As spring progresses, Chorus Frogs call from two ephemeral ponds, Wood Thrushes sing from various areas of the forest, and the last native spring ephemerals offer flowers in the purple to pink end of the floral spectrum. Virginia Waterleaf (*Hydrophyllum virginianum*) is common and fairly widespread while Jacob's Ladder

(*Polemonium reptans*) and, in my opinion one of the most attractive of the mid-spring flowers, Wild Phlox (*Phlox divaricata*), are both uncommon. The most flamboyant pink comes from clumps of Wild Geranium (*Geranium maculatum*) seen from the Volksweg.

At this time of year one of the invasive trees, White Mulberry (*Morus alba*), produces its fruits in abundance. We saw our first vivid yellow female Scarlet Tanager perched among Poison Ivy (*Toxicodendron radicans*) while eating mulberries. In the late summer I have watched with combined joy and dread as flocks of Yellow-rumped Warblers gathered to eat the fruits of Poison Ivy, a common and problematic member of the native flora.

In late spring three of the four common invasive shrubs become more noticeable. Autumn Olive (*Elaeagnus umbellata*) has a firm hold on

the sun-exposed hillside in the south end of the trail forest and is slowly moving north. Amur Honeysuckle (*Lonicera maackii*) is more common in shadier locations and is spreading rather quickly. Once we witnessed a Red-bellied Woodpecker dining on honeysuckle fruit. Japanese Barberry (*Berberis thunbergii*) is also showing up at scattered locations in the forest. This leaves the northern part of the forest the least affected and the most representative of an eastern forest.

On every walk through the forest I have hand-pulled seedling- to sapling-sized Autumn Olives, and have stripped foliage from larger specimens in replication of herbivory. Amur Honeysuckle proves easier to pull and I've excised fairly large specimens. In 2006, I located a cluster of 12 large

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PHOTOGRAPH BY STEPHEN JOHNSON

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shrubs of Japanese Barberry in the north end of the forest and removed them by cutting their roots with a knife, hand-pulling the trunk and dropping the exposed plants, roots up, on a fallen log to air-dry. Two years later, I was happy to see Dutchman's Breeches in the space cleared, and of course, Poison Ivy.

By midsummer there is little colour other than green, but a persistent search brings out a few treasures. In the western forest the clear-blue flowers of a small population of American Bellflower (*Campanula americana*) were a welcome sight. Mary and I found two here with white flowers, a phenomenon I haven't seen elsewhere. A grass I remember from the forests of Central Virginia, Bottlebrush Grass (*Hystrix patula*), is found only on sunny slopes in the eastern part of the forest. In the shady understorey of the forest's interior is the rare Wild Licorice (*Galium*

circaezens). Low to the ground and in the shade are other localized and architecturally interesting green-flowered plants such as Clearweed (*Pilea pumila*), the statuesque Jack-in-the-pulpit (*Arisaema triphyllum*) and the easily overlooked Rattlesnake Fern (*Botrychium virginianum*).

Late summer into autumn is when the orchids begin to flower. There are two species here that help make this forest a gem. The most common is Autumn Coralroot (*Corallorhiza odontorhiza* var. *odontorhiza*). This cleistogamous (non-opening) flower variety of *C. odontorhiza* is by far the most common; it often occurs side by side with a more-limited-in-distribution variety, the showier, open-flowered (chasmogamous) spotted-lipped Pringle's Autumn Coralroot (*C. odontorhiza* var. *pringeli*). Even before the flowers open you can tell these two varieties apart. Pringle's has a much more deeply coloured red floral scape.

The other orchid is the State-level Threatened species, Northern Oval Ladies'-tresses (*Spiranthes ovalis*). It is sadly diminishing since Autumn Olive is overtaking its primary location at the south end of the forest. The remaining site for this orchid is a small hill in the east where it occurs alongside a fairly large cluster of Autumn Coralroot. Sadly, this location is rapidly being overrun by Amur Honeysuckle.

As if these invasive shrubs aren't enough insult to the forest plant community, a despicable herbaceous plant is on its way. In a nearby city woodland park, Garlic Mustard (*Alliaria petiolata*) first appeared in 2008. Two years later, the mustard was found throughout the park. Mary and I will be on constant lookout for its inevitable arrival at the Indian Trail.

Stephen Johnson is a freelance ecologist and botanist living in Pella, Iowa.

Calendar of Events

September 25, 2010

NANPS PRAIRIE EXCURSION

Alderville, Ontario

Excursion to Alderville Black Oak Savanna and Tallgrass Prairie, Red Cloud Cemetery, and a private prairie restoration, John Oyston's Oak Hills Farm. Watch the website, www.nanps.org, or contact excursions@nanps.org for details.

September 25, 2010

SECOND ANNUAL NATIVE KNOWLEDGE CONFERENCE AND ECO-EXHIBIT

Great Barrington, Massachusetts

This day-long conference at Monument Mountain High School will include topics such as The History of Native Plants and Underused Natives. Visit www.projectnative.org or call 413-274-3433.

October 2, 2010

NANPS ANNUAL GENERAL MEETING & PLANT SALE
Markham, Ontario

Ornithologist Dr. Bridget Stutchbury, author of the book *The Bird Detective*, will be the keynote speaker at the Markham Civic Centre event. Presentation of Paul McGaw Memorial Conservation Award and NANPS Garden Awards. Sale of native plants. Visit www.nanps.org.

October 8-10, 2010

MID-SOUTH NATIVE PLANT CONFERENCE: NATIVES AND BEYOND: SUSTAINABLE PLANTS, GARDENS AND COMMUNITIES

Memphis, Tennessee
Time Magazine's "Hero for the Planet", Dr. Peter Raven, will be the keynote speaker. For registration, call (901)761-5250; for additional

details, see the Event Calendar at www.dixon.org.

October 27, 2010

TBG SPEAKERS' SERIES

Toronto, Ontario

Douglas Tallamy, author of *Bringing Nature Home*, will be speaking at the Toronto Botanical Gardens. Stay tuned to www.nanps.org for details as they become available. NANPS members receive \$10 off admission price.



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Heart's Content

by *Natalie Helferty*

The wind is blowing across the fields. The birds are singing. It is early morning in June and we are walking in large strides through the grasses wet with dew. Ella Haley talks to us, my brother Lloyd and me, about the alfalfa and mixed hay she and her husband Richard Turnstall have planted on Heart's Content, their organic farm. This is to feed their two draft horses. The horses plough the 23 hectares (57 acres) used to grow Community Shared Agriculture vegetables sold to local families and the farmers' market. I am there on behalf of the Ontario Farmland Trust to do a bird survey for the conservation easement they wish to place on the farm. My brother will demonstrate the making of biochar, a carbon-rich fertilizer made from wood and dried crop waste.

We wind our way down the row between this farm and the neighbour's, who has planted a cover crop of oats this year. There are no fences dividing the land, just a demarcation of different plants that makes the two properties distinct. At the bottom of the hill, a small creek traverses the boundaries. This is spring run-off from the headwaters of a Grand River tributary. It is now clear and cold, but will warm and dry up this summer into a wetland area on the neighbour's property. It hasn't been ditched or drained; a vestige of the original wetlands of southwestern Ontario. So few wetlands remain in the province that it is a joy to see even a bed of rushes and sedges surrounded by mature trees.

Ella's side of the stream is now surrounded by planted Black Walnut (*Juglans nigra*) that buffer the apiary set up by a neighbouring farmer. No rent, just an exchange of bee habitat for honey. This friendly gesture of faith representing the farming values of old is all that is required. We circle the bees carefully; they are active this morning in their alcove embraced by the walnut trees, White Pines (*Pinus*

strobus) and invaded White Spruce (*Picea glauca*) on either side, a sheltered area that keeps the sun and sleet at bay in harsher weather. Here the birds also benefit: the Common Yellowthroat, the Red-eyed Vireo and the Red-winged Blackbird all enjoy

trunks are broad and impressive – remains of a pioneer past. Our ancestors knew what they were doing: leave the best and take the rest. We walk slowly through the forest edge to see the typical understorey of Mayapple (*Podophyllum peltatum*),



PHOTOGRAPH BY NATALIE HELFERTY

Old-growth Sugar Maples on the woodland edge at Heart's Content

the woodland/wetland edge, feeding off the understorey of Black Raspberry (*Rubus occidentalis*), Reed Canarygrass (*Phalaris arundinacea*) and Goldenrods (*Solidago* spp.)

As we continue up the other side of the gentle valley slope, we begin to hear the strains of Wood Thrush, "oh-le-oh-lay". They sing later than their cousins, the American Robins, who have broken the morning dew with their song. One bird here, another bird there; not competing, but singing a chorus, almost learning their song from each other in reverence of the new day.

We reach the forest, some trees over 100 years old. The Sugar Maples (*Acer saccharum*) and stalwart White Pines are astounding in girth. Open-grown on the edge of this County forest, the

Bloodroot (*Sanguinaria canadensis*) and Jack-in-the-pulpit (*Arisaema triphyllum*), with Pennsylvania Sedge (*Carex pensylvanica*) carpeting the forest floor. The trees are varied and old, including White Ash (*Fraxinus americana*), Trembling Aspen (*Populus tremuloides*), American Basswood (*Tilia americana*), American Beech (*Fagus grandifolia*), Ironwood (*Ostrya virginiana*), Red Maple (*Acer rubrum*) and Red Oak (*Quercus rubra*), typical of deciduous forests. But something is different. A few species are made for here, Carolinian: Running Strawberry Vine (*Euonymus obovatus*), Blue-beech (*Carpinus caroliniana*), and White Oak (*Quercus alba*). We continue onward and see Swamp White Oak

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(*Q. bicolor*), Black Oak (*Q. velutina*) and Yellow Birch (*Betula allegheniensis*), indicators of moist soil.

At the back of the property we reach a pond, just the “right size” to be called a vernal or spring ephemeral pool, but just deep enough not to dry up through the hot summer months. The green frogs are silent this morning, basking in the water. Something hops off a log in the middle and we find another log with a wet puddle behind. Perhaps they were turtles; they moved too fast to tell. Jefferson Salamanders are known to inhabit the area, so I take a closer look. Eggs! But it's now late June – the eggs probably belong to the frogs. They are small with dark brown embryos; they're scattered in clusters in the shallowest area along the wetland margin, freshly laid. We hope next year to catch the salamanders' march in early spring, but for now it's satisfying to see the wetland is producing young of other amphibian species.

Another bend takes us around the edge of the field and into a recently planted buffer against the highway of pine, maple and oak – or what is left of them. The deer were feeding this winter and the leafy trees became more a buffet than a buffer. Alas, choosing trees that are not a favourite food is the best way to keep the deer away...or planting thickly so a few “edibles” survive. No hunting is allowed here. This land backed onto a former Boy Scout camp before the highway was built and the old trail road remains on this side now, part of Heart's Content. The words carved on a trio of old beech trees remain as a testament to the romantic boys (“I love Mary Harding”) and the locals (“Bud Dowling 9/1911”). If not for the traffic noise, we could transport ourselves back in time through imagination alone.

When we decide to turn back, we've walked over a mile down the trail road. Another pond dug deeper by

Ella's parents, now living on a nearby farm, is proudly shown, surrounded by a blanket of Jewelweed (*Impatiens capensis*) and Sensitive Fern (*Onoclea sensibilis*). These are watched over by Sugar Maple and White Pine over 80 years old. The property is well worth protecting as it is, but Ella and Richard plan to embark on even more improvements, adding more trees to

for those in the air *and* on the ground.

We leave reluctantly, followed over the field by the adult hawks as they keep up their constant encouragement – we believe it's for the youngsters, but perhaps they are also calling to keep us moving away from the nest. Over the grassy fields we head back to the barnyard. The songs of Bobolinks, Eastern Kingbirds, Savannah



PHOTOGRAPH BY NATALIE HELFERTY

Heart's Content farm

the already planted Butternut (*Juglans cinerea*), Redbud (*Cercis canadensis*) and Tulip-tree (*Liriodendron tulipifera*).

We climb back out of the shaded woods into the field, this time accompanied by a repeating plaintive cry, “wheep, wheep, wheep!” A baby Red-tailed Hawk is calling (or maybe there are two!). His parents call back with their harsh downward “keee-err”. The white-feathered youngster is fluttering through the tree-tops, as if on first flight. One adult spirals above him over the field, encouraging him to “Fly, fly!” while the other calls from behind him in the forest, “Keep going!” It is an exciting moment both

Sparrows, Song Sparrows, Vesper Sparrows and a lone Grasshopper Sparrow are caught on the wind. It is the sound of an open farmland...familiar and relaxing. We absorb it all.

In addition to the loads of regular chores on a farm, there are the native trees to be planted, their pots sitting by the back door. The saplings stand as a testament to Ella and Richard's love of the land, the animals, the trees, the community – that's where their hearts find contentment.

Natalie Helferty is an ecological consultant with her firm Natural Heritage Consulting.

Bergamot

by Jeanette Lynes

Ten tipsy
well-bred women
in mauve satin
gowns snapping mauve
bath towels at each
other
in a tree house,
long green bottles
below,
empty.



ILLUSTRATION BY JOHN MORI

Jeanette Lynes is the author of five collections of poetry, most recently *The New Blue Distance* (Wolsak and Wynn, 2009). "Bergamot" is from the collection *Left Fields* (Wolsak and Wynn, 2003).

New & Noted

Cultivating Our Roots - Growing Authentic Prairie Wildflowers and Grasses

By Nora Stewart

Available from the online store at the Native Plant Society of Saskatchewan website, www.npss.sk.ca for \$32 plus shipping. 155 pages

In my next life, I would like to do exactly what Nora Stewart has done – build a seed company specializing in native prairie species. This valuable guide tells readers how to go about doing just that. The setting is Saskatchewan, where Nora started her business in 1993, planting two hectares (five acres) of pasture with over 60 species of wildflowers and 22 species of native grasses.

Finally (!) we have a book originating from a Canadian province about the prairie species inhabiting short grass prairies. Most of the books available in Ontario about native prairie species originate from the U.S., and the only book in my library about Saskatchewan forbs is an old (1966) booklet entitled *Woodland Wildflowers of Eastern Saskatchewan*.

Cultivating Our Roots is divided into two parts. In the first, Ms. Stewart provides us with a recipe for growing natives. She writes about acquiring seed and seed germination, the pros and cons of indoor vs. outdoor growing, harvesting, and the cleaning & storage of seeds. The author provides tips on how to overcome some of the obstacles she encountered, such as weeds and predation. She discusses garden design, choice of site, and site preparation.

In the second part of the book, the author outlines species of forbs and grasses she has grown. There are photos of each species in flower and in seed, the seed capsule or seed head for each as well as the young seedling with its first true leaves. The latter helps in identifying whether what is coming up agrees with what the grower anticipates or happens to be some free-loading stow-away. As a young

seed grower, I clearly remember nurturing for months some seeds I had grown in a pot believing them to be Black Cohosh (*Cimicifuga racemosa*). Eventually, in a moment of insight, I realized that I had been tending Ragweed (*Ambrosia artemisiifolia*).

Since the species she features are common and widespread on prairies, the author believes that much of her advice would be applicable in Manitoba, Alberta and the northern U.S. Examining her forb species, I would guess that almost half are also native to Ontario, particularly in tallgrass prairies. Beyond these, there are species related to ones we know well here – in Saskatchewan one finds Meadow and Dotted Blazing Star (*Liatris ligulistylis* and *punctata*) whereas in Ontario we have Marsh and Dwarf Blazing Stars (*L. spicata* and *cylindracea*).

The breadth of information about native prairie grasses is particularly welcome, including the primer on grass anatomy. A description of the grass and what type of habitat it likes is provided. Some of these are known to me: Little Bluestem (*Schizachyrium scoparium*), June Grass (*Koeleria macrantha* or *K. cristata*), Side-oats Grama (*Bouteloua curtipendula*). Others that are also native in Ontario were totally new to me: Western Wheat Grass (*Pascopyrum smithii*), Spear Grass also known as Needle and thread (*Hesperostipa comata* ssp. *comata*). Still others, such as Prairie Muhly (*Muhlenbergia cuspidata*) and Early Blue Grass (*Poa cusickii*), I can only wish were native here.

This book would be very useful to anyone designing a sunny native garden for their home, school, or business. I found myself repeatedly returning to its pages for inspiration about species selection as I contemplated my new garden.

Review by Darcie McKelvey



Edible and Medicinal Plants of Canada

By Andrew McKinnon et al
Edmonton: Lone Pine Publishing, 2009
ISBN 13: 978-1-55105-572-5
Softcover: \$29.95, 448 pages

Did you know that the wood of hawthorn shrubs (*Crataegus* spp.) is hard and makes excellent walking sticks? Or that spruce beer (made from *Picea* spp.), drunk by early northern travellers, tastes like root beer? Or that an exudation from Rattlesnake-plantain (*Goodyera oblongifolia*) can be used as chewing gum? This is just a snippet of the fascinating information to be found in *Edible and Medicinal Plants of Canada*.

Richly illustrated with colour photographs and drawings, this exquisite field guide shows the many ways in which plants, in the geographical area now defined as Canada, have been used for food, shelter, clothing and medicines by First Nations and European colonists. But, as the authors take great pains to point out, it is not a how-to guide for eating wild plants. Rather, it is a book that engenders respect and awe for the natural world, precisely what the authors intended. In the introduction, they not only make it clear that plants should be collected only after considering how rare or abundant they are, they also provide guidelines for gathering plants (for example, never take more than five percent of the population, and never collect from protected or heavily used areas such as parks and nature preserves). They also recommend that, following a First Nations tradition, harvesters of plants leave a gift of tobacco or a prayer in thanks for the gift of healing.

Edible and Medicinal Plants of Canada is divided into sections for trees, shrubs, vines, herbs, grasses, ferns and poisonous plants (although warnings are given throughout the book where the plants mentioned may be harmful to people or livestock). These sections are in turn divided into

families of plants, so it's easiest when searching for a specific plant to check the index...but it's more fun just to browse the book. Common and Latin names, detailed plant descriptions, habitat and geographic range are offered, and alien species are identified. But the greatest treasures are the descriptions of how the native plants were once used. Much of this information comes from "ethnobotanical accounts written in collaboration with First Nations healers" as well as "pioneer and modern herbal and scientific literature".

Although it is not a comprehensive guide to plants in Canada, this book packs in a vast array of plants and makes a great field guide, helping us identify unknown plants if we can just figure out to which family they belong. All in all, a book for every plant enthusiast's library.



Gardening with Native Plants: A Biodiversity Handbook

Long Point Basin Land Trust, 2010
Available from LPBLT, PO Box 468, Port Rowan, Ontario, N0E 1M0 for \$5.

Gardening with Native Plants differs hugely from the previous book in size and geographic scope, but it's written with the same reverence for our native plants and ecosystems. Tailored to southern Ontario's Carolinian Region, this nifty, full-colour, 24-page guide provides advice on naturalizing for wildlife (including water features and nest boxes), tips on how to design a native plant garden, and a listing of 150 plant species for Norfolk, Elgin, Haldimand, Brant and

Oxford Counties. It offers a foundation for gardeners who want to recreate natural landscapes that attract birds, bees, butterflies and other insects. It explains why larger-scale restoration should be undertaken by those who have substantial plots of land, but cautions against planting non-native species that can become invasive. It outlines the extent of habitat loss on the north shores of Lake Erie and emphasizes the ecological significance of the wild areas that remain. Finally, it explains why it's crucial that we each do our part, ecologically restoring our property not only to enhance local biodiversity but also to educate others.

Gardening with Native Plants was published in celebration of Earth Week and the International Year of Biodiversity. Copies were donated to local schools for their libraries and to use as prizes for environmental activities, enhancing the conservation efforts of young people in Norfolk County.

The Long Point Basin Land Trust is to be commended for its work preserving and restoring natural habitats in the Carolinian Region, for its stewardship of the Jackson-Gunn Old Growth Forest and the Arthur Langford Nature Reserve, for its outreach, research and species-at-risk programs, and now, for this delightful biodiversity handbook.

Reviews by Irene Fedun



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In Remembrance

Dagmar Baur, who accepted the 2007 NANPS Community Garden Award for her work in developing the Bain Co-op gardens in Toronto, passed away this spring. Born in Poland during WWII, Dagmar knew privation during her early life but never failed to recognize the great gifts she'd been given: her loving family and her connection with Nature.

In Canada, Dagmar joined naturalist groups and never stopped asking questions. She learned about fungi (mushroom picking had been a childhood joy in European forests) and their intimate relationship with their surrounding environment, trees, substrate and physiography. She learned about indigenous plants, and the aliens, which ones were edible and which not, and how to use them to prepare tasty meals. She learned that planting native trees, shrubs, and herbaceous plants – in environments appropriate to their needs – was far more rewarding than planting



A PHOTOGRAPH BY ERIC BELDOWSKI

cultivated perennials or annuals.

With all the knowledge she acquired, Dagmar became a community gardener, educator and writer, growing heritage vegetables and recreating the South Oaks courtyard at Bain as an oasis of native vegetation. She offered workshops on edible weeds and wild plants. A couple of years ago, Dagmar wrote an article for *The Blazing Star* about one of her favourites, Virginia Waterleaf (*Hydrophyllum virginianum*), whose young leaves she described as “succulent and delicious”.

Thanks to Dagmar's vision, her dedication and her doggedness, the Bain Co-op lands are being steadily transformed into beautiful, tranquil

places where children and adults alike happily interact with Nature. In Dagmar's memory, a website has been created where anyone can post photographs or reminiscences of this beloved member of the naturalist community, dagi.muchloved.com.



Lorrie Otto, conservationist and environmental activist, died peacefully in May at 90 years of age. Lorrie was a charismatic crusader against the spraying of DDT in the 1950's and 1960's when it was still widely believed to be a benign chemical. She campaigned on behalf of land conservation and roadside plantings of native flowers, and opposed the concept of the manicured and sprayed lawn. A field editor for *Wildflower* magazine, Lorrie wrote about her many environmental causes and her beloved prairie garden in Bayside, Wisconsin, which she had to fight to protect from misguided city officials. Wild Ones, a national U.S. organization founded in 1977, was based upon the ecological principles espoused by Lorrie.

A guardian of the Earth to the end, Lorrie sent a holiday greeting last December to Wild Ones members, describing how she would be buried in a “green and natural cemetery”. As she explained: “(1) No embalming fluids will be used. Such powerful poisons will never be here to leach into the water table. (2) No casket. The corpse



PHOTOGRAPH COURTESY WILD ONES TAPESTRY OF LEARNING CO

will be wrapped like a mummy in white fabric. (3) No cremation. It takes two to three hours of 1,400 degrees F. heat (760 Celsius) to convert a human body to ashes! (4) All landscaping must be done with native plants.” From the list that matched their climate and soil type given to her by the Greenacres Memorial Park funeral director, Lorrie chose a White Oak (*Quercus alba*), a wild rose (*Rosa* spp.) and Nodding Onions (*Allium cernuum*). “It is such a wonderful feeling to know that my death will result in more nutrition and protection of the soil and its dependent life,” she wrote.

Visit www.for-wild.org to make a donation in Lorrie's name to the Seeds for Education Grant Program or offer a tribute in her memory.

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Continued from page 1

of the Rockies, and is naturalized in many other areas in the world's temperate and subtropical regions.

Oenothera biennis blooms from June through September. The four-petaled flowers hold their nectar in a very long calyx, accessible to the last drop only by moths with their long proboscis. For pollination, this plant depends upon night-flying moths, which are attracted by the lemony scent of the flowers and their bright nectar guides, invisible to us, but visible in the ultraviolet part of the spectrum seen by moths and bees. Once the plant is satisfied that it has set enough seed, its flowers will stay open throughout the day. (Remember this nifty bit of botanical trivia when you see Evening Primrose blooming in the mid-afternoon.)

Oenothera biennis sports edible roots, shoots, flowers, leaves and seedpods but its real claim to fame is the oil made from its pressed seeds. Evening Primrose Oil is rich in gamma linoleic acid (GLA), one of the essential fatty acids that our bodies cannot make. GLA is reported to be useful in treating hardening of the arteries, eczema, cirrhosis, arthritis, PMS, multiple sclerosis and high blood pressure. The oil is probably best known as a treatment for menstrual pain.

Given its wide range of medicinal attributes, we might be well advised to eat this plant! An older common name, King's Cure-all, hints at its healing properties. In the past, it was used topically to treat bruises, reduce reddening of the skin, and speed healing of wounds. Internally it was used to treat coughs and gastrointestinal disorders, and as a painkiller.

My favourite prairie plant book, *Tallgrass Prairie Wildflowers* by Doug Ladd, describes Evening Primrose as "one of the few native weeds of our tallgrass prairies". Maybe it is a weed, but from my experience, it's also a great primary colonizer for prairie plantings. Perhaps the primrose did us a favour in 2009. The rosettes may have made it difficult for the non-natives to get a foothold, but seemed

to act as a nursery for the native species...

I started another, final, prairie planting this spring, leaving *Oenothera* out of the mix this time. The plot is struggling. Even with lots of rain, only a few seedlings seem to be dotting the bare soil. Perhaps if the mix had included Evening Primrose, my new prairie plants would be thriving under the protective shade of their rosettes.

Lorraine Brown is a biologist and naturalist who grows prairie on her farm north of Owen Sound, ON.

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