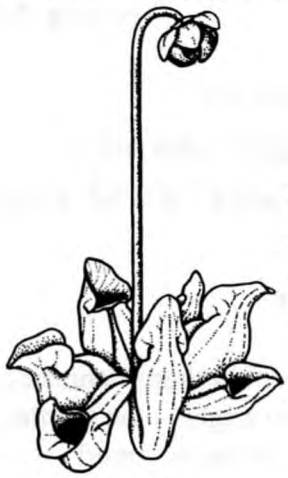


Sarracenia

Volume 14, Number 2 Winter 2006

Newsletter of the Wildflower Society of Newfoundland and Labrador
c/o Botanical Garden, Memorial University of Newfoundland, St. John's, NL, A1C 5S7

Contents:

Upcoming Meetings:

February l: The Natural Beauty of the Falkland Islands, Argentina, Chile and Brazil: natural history, fauna and flora
Speaker: Brian Bursey

March 1: Photographing mushrooms and wildflowers with digital SLR
Speaker: John Bridson

April 5: The fun of collecting and pressing wildflowers
Speaker: Nathalie Djan-Chekar

May 3: The Rare Boreal Felt Lichen (*Erioderma pedicellatum*)of the Avalon Peninsula
Speaker: Eugene Conway

Any articles from members would be most welcomed and may be sent via email to todd.boland@warp.nfld.net or via regular mail

Todd Boland
81 Stamp's Lane
St. John's, NF
A1B 3H7

2005-06 Executive

President: Carmel Conway	722-0121
abcrhynd@nl.rogers.com	
Vice-president: John Maunder	335-2462
Secretary: Heather Saunders	368-6935
Treasurer: Jackie Feltham	895-0477
Past President: Glenda Quinn	834-8588
Sarracenia Editor: Todd Boland	753-6027
Board Members: Judy Blakeley	437-6852
Helen Jones	437-6852
Howard Clase	753-6415

President's Message:

It seems that 2006 is shaping up to be a most exciting wildflower year.

As you will see we have a great line-up of speakers for our winter season. I would like to remind members that it is a great way to escape the winter doldrums. The times have been set for our summer field trip to the Twillingate-Fogo-Cape Freels Area, and there is a buzz in the air. John Maunder is now fine-tuning our schedule. We are hoping all members will confirm their attendance as quickly as possible.

Our membership is now close to 80 and growing. If any member has not renewed, a form is attached.

I wish to thank all members who made our Christmas Party such as success with their images (Karen Herzberg, Gene Herzberg, Ed Hayden, Alan Stein, Helen Jones, John Maunder, Howard Clase, Lydia Snellen and myself).

Finally, it is with great sadness that I write a tribute to Bill Titford. For many wildflower members wild flowering is a recent hobby, but Bill was truly a trailblazer and will be missed.

Iris versicolor, a common plant of the Northeast Coast

Wildflower Society of Newfoundland and Labrador "Northeasterly Gales" Field Trip - 2006 by John Maunder

After terrorizing the Great Northern Peninsula last summer, we are off to frighten the Northeast Coast of the Island this coming summer!

While the Society HAS traveled to the area before, the northeast coast of the Island remains very poorly-studied, botanically ... I suppose, a legacy of the perceived "botanical sexiness" - and, therefore, the irresistible draw - of the west coast "limestone barrens" ... But the northeast coast is full of wonders too!

How it differs from the Great Northern Peninsula, is that we just don't have every plant we want to see "tied down and labelled"! Thus this summer's trip will be one of exploring and, hopefully, of discovering new things. Not to mention an opportunity to visit many new places.

Luckily, we do have the results of some quite recent northeast coast collecting by Nathalie Djan-Chékar and Luc Brouillet, and by Claudia Hanel, to help to guide us to many good sites.

The greatest wonders of the trip will probably be seen in the salt marshes at Gambo and amongst the islands on the Highway route to Twillingate, where we will see Sea Lavender (*Limonium carolinianum*), Seaside Goldenrod (*Solidago sempervirens*), Seablight (*Suaeda* spp.), and Glasswort (*Salicornia maritima*), and a host of other coastal rarities. The beaches, lagoons and dunes of the Cape Freels area will offer a chance to see Leathery Grapefern (*Botrychium multifidum*) and its cousin, the Common Moonwort (*Botrychium lunaria*). For some, it

will be the first time visiting storied Fogo Island, where we will climb high hills, scour sandy beaches, and try to relocate Golden Heather *(Hudsonia ericoides)* at barren, rocky Barr'd Islands. At Dildo Run Park, we will try to find the small Roundleaf Orchid (*Platanthera orbiculata*) which has been reported from there. Those who have not botanized Twillingate before will be surprised to see Laurentian Primrose (*Primula laurentiana*), and other wonderful "limestone species", including saxifrages, clinging to the shore cliffs below the lighthouse. To finish up, we will have a look at the almost unexplored forested and barren areas north of Botwood, and go in search of the Rusty Cliff Brake fern (*Woodsia ilvensis*) that grows on huge erratic boulders in the woods at Grand Falls!

All in all, it should be a wonderful and varied trip. For those interested in joining us, BOOK NOW ... hotel spaces are hard to come-by on this coast.

A number of rooms have been held in the Society's name (see following preliminary agenda), but the best way to be sure you will get one is to act right away! ... *Hamlet procrastinated, and look what happened to him!*

Wildflower Society of Newfoundland and Labrador "Northeasterly Gales" Field Trip - 2006 Preliminary Agenda (many more details will be forthcoming in a later version).

Day 0: July 21, Friday - Optional overnight at Traytown/Glovertown or Gander, for those coming from the east and the west ... Gambo is about a 3.5 hour+ drive from St. John''s, and about a 4.5 hour+ drive from Corner Brook.

Some Suggested Traytown/Glovertown Hotels:
Blue Water Cabins, 709- 533-2553; 17 units, including 9 efficiency (17 units held)
Traytown Tourist Cabins, (offseason 709-722-1779) or 709-533-2246 or 709-690-2500; 13 cabins/housekeeping
Pinetree Lodge and Cabins, 709-533-6601 or 1-877-533-6601; 19 units

Day 1: July 22, Saturday - Gambo to NewWesValley (ie. Cape Freels) area. Meet at Red Pine stand (just west of Pine Acres farm, to the east of Gambo - details later) at 10 am, or at Gambo Railway bridge trail, in the town, at 10:45 am.

Areas to visit include the Gambo red pine stand, the Gambo river and salt-marsh, various stops en route to NewWesValley including Greenspond. In the evening we might want to check out the dinner theatre in Newtown.

Suggested Evening Hotels:
Badger's Quay, Blue Mist Motel, 709-536-5690; 8 rooms (held by "Clyde")
Lumsden, Barbour Cabins, 1-877-530-2107 (or Tina Barbour at 709-530-2853, or, failing that, try Diane Goodyear at 709-530-2267); 6 cabins plus 5 B&B (private baths) (6 cabins + one trailer held by "Tina")
... and, if necessary, try
Indian Bay (Centreville), Indian Bay Connections, 709-678-2332; 6 cottages (held by "Irene")
Centreville, Margo's Motel Rooms, 709-678-2080/2084; 5 rooms
Wesleyville, Winsor House Heritage Inn, 709-536-2600; 4 rooms

Day 2: July 23, Sunday - Explore Cape Freels area including Newtown, Cape Freels, Windmill Bight, Lumsden and Deadman's Bay. Accommodations the same as Day 1.

Day 3: July 24, Monday - Through Gander Bay to Fogo Island (crossing via mid-afternoon ferry: exact times will be posted later) - 5 ferries a day, usually drive-on. Areas we may visit include Musgrave Harbour, Ladle Cove, Clarke's Head, Dog Bay Pond and Farewell (at ferry terminal).

Suggested Evening Hotels:
Man 'O War Cove, Fogo Island, near ferry dock. Quiet Cannon Hotel, 709-627-3477; 13 rooms (inc. 2 efficiency) (confirmed by "Nellie")
Fogo. Grace Payne's Efficiency Units, 709-266-1030; 10 efficiency units (held by "Grace")
Fogo. Peg's B&B, call Matilda at 709-266-2719 or try 709-266-2392 (held by "Matilda")
Centre of the Island. Chester's Fried Stop[!], one three-bedroom house. 709-266-1200
Fogo. Diane''s Efficiency Units, 709-266-2419. Two double rooms plus one single.

Day 4: July 25, Tuesday - Explore Fogo Island including Brimstone Head, Fogo Mountain, Lion's Den, Sandy Cove, Deep Bay and Stag Harbour Pond. Evening accommodations same as Day 3.

Day 5: July 26, Wednesday - Ferry to "mainland", then on towards Twillingate with stops by Boyd's Cove, Dildo Run Park, Summerford, Chapel Island saltmarsh and Twillingate.

Suggested Evening Hotel:
Anchor Inn, 709-884-2777; 18 rooms (held by "John Anstey").
Harbour Lights Inn (heritage B&B), 709-884-2763

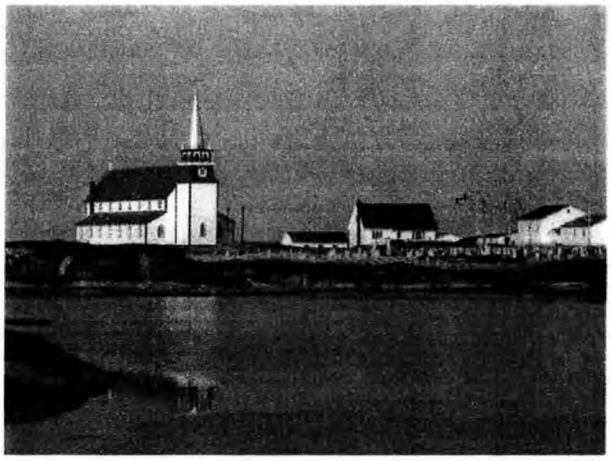
Day 6: July 27, Thursday - Explore Twillingate, and then to Lewisporte with stops by the Lighthouse Trail to Mining Park and various points on New World Island.

Suggested Evening Hotel: Brittany Inn, 535-2533; (25 rooms held by "Charlene")
Nippard''s B&B, 535-8152
Campbellton. Inn on the Hill, 709-261-2438

Day 7: July 28, Friday - To Grand Falls, via Lewisporte and Botwood areas with stops in the Lewisporte area, Peter's River, Botwood and river walks near Bishop's Falls and Grand Falls.

Suggested Evening Hotel:
Mt. Peyton Hotel, 709-489-2251 (25 rooms held by "Rod")

Day 8: July 29, Saturday - Most will head home?



The Anglican Church in Newtown. Photo by Todd Boland

BOOK RELEASE:

Dr. Peter Scott, Wildflower Member, is due to have a release of two new books in the coming months, Wildflowers of Newfoundland and Labrador, and Newfoundland Gardening, 2nd Edition. We hope to have Peter as a guest speaker in the Fall Season to discuss his new wildflower book.

Tribute To Bill Titford

(Jan 9, 1933-Sept 29, 2004)
Author of A Travellers' Guide to Wild Flowers of Newfoundland

By: Carmel Conway

It was at one of my first wildflower meetings in 1995 at the Garden that Bill Titford gave a talk. I remember Bill vividly that evening. He was an incredibly engaging and enthusiastic speaker. It was clear that he had a profound love of the great outdoors. Bill modestly admitted that he had no scientific background in plants as such, but an innate curiosity about things around him.

Always with his Pentax MG on hand, Bill, with his wife June, their five children and two Newfoundland dogs spent their summers camping all around the island. It was when Bill retired in 1993, and having amassed quite a collection of wildflower images, that they decided it was time to complete a record of their findings, and so began the creation of "**A Travellers' Guide to Wild Flowers of Newfoundland**. Bill would be the photographer with June his scout and secretary!

This new field guide by the Titfords was like a dream come true for many. It had over 400 color plates with the dicotyledons and monocotyledons grouped according to family- the first such guide of its kind of Newfoundland flora. I remember flipping through each page and ticking off the plants I had already seen, and making note of their discoveries.

June explained the difficulty in getting the guide published here in Newfoundland and their enormous financial risk. It was eventually published in Hong Kong! Having no distributor for the guide, they traveled the entire island attempting to get it in every craft store, and then months later returning to obtain their monies. While it might have seemed like hard work, according to June, it was enormous fun. Today it is close to impossible to get your hand on a copy!

William Bunclark Titford was born in St. John's on January 9th, 1933. He attended Bishop Field College, graduated with a Bachelor of Science from Memorial in 1955, and went on to obtain a degree in Town and Regional Planning from the University of Toronto in 1962. As part of his work life Bill was employed in the Provincial Planning Office; was an instructor with the College of Trades and Technology, and Executive Director of the Newfoundland Federation of Municipalities. Bill was also a man of many interests. In addition to his love of the outdoors, Bill was an avid stamp and coin collector, poet, and square dancer.

June and Bill were both active members of our Society. What I most remember about Bill was his easy-going, no nonsense manner. I remember on one occasion complaining to him that my tripod was heavy and cumbersome, to which he quickly replied "sometimes the old knee can be your tripod and steady things up for you". Bill believed in traveling light.

Our Society was deeply saddened by Bill's sudden passing. As we hike along we will continue to pull his field guide from our knapsacks, stop and discuss. One of his favorite city trails was the Long Pond Trail and our Society will host an annual walk along that trail each summer in his memory. Bill clearly made an important mark on the botanical world here in Newfoundland.

Following are two samples of Bill's poetry:

Ragged Fringed Orchid
(Habenaria lacera)

To call this orchid "ragged"
does not really treat it right.
It diminishes the angel host;
Dressed all in white,
Dancing around the flower tip,
Happy as can be,
They've dressed for the occasion
As anyone can see.
Let's call it "angel orchid"
To give it more acclaim.'
H. angelica-fimbriata
can be its Latin name.

(W.B.T.)

Wood Strawberry
(Fragaria vesca)

What a "common" little berry
But I love you more than most,
For I have you with my breakfast
As jam upon my toast.

As I savour your red sweetness
Daring winter's frosty days,
I remember early summer
With its warm and sunny rays.

(W.B.T.)

Platanthera lacera. Photo by Todd Boland

The Repatriation of *Iris versicolor forma Murrayana* by Todd Boland

Among my favourite native wildflowers are *Iris versicolor* and *I. hookeri* (aka *I. setosa* ssp. *canadensis*). For many years I have scoured the Island looking for aberrant colour forms of these iris. *Iris hookeri* has proven to be remarkably consistent in its colour. However, *I. versicolor* has shown variation from pale blue to deep purple-blue. However, until recently, the white form of either species has eluded me. If you look up both species in M. L. Fernald's **Gray's Manual of Botany**, you will see a description of the white forms: *pallidiflora* for the white form of *I. hookeri* and *Murrayana* for the white form of *I. versicolor*. Next to that latter listing, it says "named in 1936 for it's discover Andrew Murray".

The world is full of coincidences. This past spring I was contacted by the vice-president of the British Iris Society in regards to an article, he was writing for their newsletter, about the white form of *I. versicolor* found in Newfoundland by Andrew Murray in the 1930's. I was floored! I never realized that the described white form in **Gray's Manual of Botany** was actually originally discovered in Newfoundland. Through further correspondence I learned the truth about this iris.

Apparently, Andrew Murray discovered the white form of *I. versicolor* growing along the Salmonier River, not far from the present day summer home of our famous local artist, Christopher Pratt. Having never seen a white iris in the wild, Mr. Murray placed an enquiry in St. John's about his discovery. His finding came to the attention of one of our foremost amateur botanists of the time, Agnes Marion Ayre. She contacted Mr. Murray about the plant and he dug

it up and brought it to her. She contacted Fernald about the discovery and also sent a piece of the root to a friend in the UK. Fernald then named the white form '*Murrayana*' as a tribute to its discoverer Andrew Murray. There has never been any reference to what happened to Ms. Ayre's plant locally, but apparently, the *I. versicolor forma Murrayana* she sent to the UK flourished and still remains in cultivation.

This past summer the Newfoundland Rock Garden Society hosted the Annual Summer Meeting of the North American Rock Garden Society. During the conference I got to meet many avid gardeners and several members of various garden interest groups from across Canada and the United States. I mentioned this iris to several people. One of these people was Helga Andrews, a member of the New England Wildflower Society. She recognized the name and thought that it was available in the US. She offered to do some investigating State-side to see if she could find a source.

About 2 weeks after the conference I got an email from her explaining that Marty Schafer and Jan Sacks, members of the Species Iris Group of North America (SIGNA) actually sold this selection from their company, Poe Pye Weed Gardens, a mail-order iris nursery in Massachusetts. I contacted Marty and Jan, explaining to them the story behind '*Murrayana*'. They were completely unaware that the selection originated from Newfoundland. What's amazing, is that they have had this selection in their possession for over 25 years and that it had changed hands many times before they gained access to it. I asked if I might purchase one. They were so intrigued about learning the story behind '*Murrayana*', they actually shipped two lovely robust plants from their nursery in Massachusetts to our Botanical Garden free of charge, a very generous act. So after about 70 years *Iris versicolor forma Murrayana* has finally made it back to its roots.

As a side note, I mentioned this story to my friend Greg Stroud, the chief park interpreter for Terra Nova National Park (some of you may recall the lichen and edible plants talks he has given to our society). He promptly told me about a white iris he found in Bonavista. I thought he was pulling my leg, but as it happened, he had the picture on his laptop which was on the back seat of his car. Greg had no idea which species it was. Scrolling down through his many pictures, he finally came to the iris. When he brought it up full-size, it ended up being the white form of *Iris hookeri*! He actually found two plants and remembered exactly where they were located. Needless to say, I have a trip planned to Bonavista next July!

Iris versicolor forma Murrayana. Photo courtesy of SIGNA.

The Very Ancient Origins of Tropical Agriculture by Robin Day

The Province of Newfoundland and Labrador has few native plants having large starchy reserves. Most seeds and tubers are small. Perhaps the plant with the largest starchy seed would be *Nuphar*, the yellow water lily, and these are available only in the late summer. *Osmunda* fern has a starchy apical shoot tip. Therefore, native peoples and settlers of our Province concentrated their efforts on animal resources where they could obtain concentrated protein and fats. These animals came from both the land and the sea. When settlers brought in potatoes and fruit tree seeds they were continuing a botanical tradition that extends far back in time. Read on...

Not so long ago the National Geographic (T.R. Reid, Oct. 1998, p.60) had the following to say about the origins of agriculture...

.."somewhere around 8000 BC Neolithic man---actually, some scholars say, it was probably Neolithic woman---began farming. Women figured out that if they saved some of the grain they gathered, scattered it on the ground and waited around a few months, more grain would spring up. The first significant agricultural crops were grasses: barley, wheat, rice etc."

This is an outdated view. Nothing could be further from the truth. The earliest forms of agriculture had nothing to do with cultivating annual cereals. The earliest forms likely involved growing root crops and caring for trees and this took place in tropical regions.

The earliest forms of agriculture had nothing to do with cultivating annual cereals but centered on the growing of root crops and caring for individual trees or small orchards. Until recently there was thought to be no evidence of this remaining in ancient soil layers. Today, botanists have identified characteristic starch grains and calcareous plant crystals, called raphides or cystoliths, that help identify ancient food plants. Crystals from an Aroid, probably Taro (*Colocasia esculenta*), have been found in Kilu Cave on Buka Island, in the Solomon group, east of New Guinea (Wickler S. The Prehistory of Buka. Dept. of Archaeology and Natural History. Australian Nat. Mus., Canberra.). The remains are dated to 27,000 BC. Taro is also called Elephant Ear, because of the leaf shape, and the base of the stem swells making a starchy tuber. Side shoots form other tubers with a brown scaly skin. The leaves are also edible when cooked and are often used as a wrapping for cooking the tubers. Taro is usually grown in wet mucky soils and some have proposed that rice may originally have been a grassy weed in the ancient taro plots. The oldest rice so far discovered has turned up in peaty soil layers in South Korea near Taejon. I lived here in 1996-7. The carbonized or burned rice seeds were found with other evidence of agriculture and surprisingly dates back to about 11,000 BC., Pleistocene agriculture, when Mammoths still roamed the world. Rice is believed to have come from tropical SE Asia, but really ancient remains have not yet been found as there was massive flooding at the end of the ice age and lowland areas were cover by the sea. For this reason archaeologists have focussed on upland cave sites like Spirit Cave in Thailand and Niahs Cave in Borneo looking for early rice remains.

In addition to cultivating taro, sugar cane, and other tubers, tropical peoples in SE Asia depended on food resources from many trees. There is coconut, banana, durian, snake fruit, mango, mangostene and numerous other trees

producing lesser known fruits and nuts. Oil palms produce oil and the stems of some palms and cycads provide large quantities of sago starch. Many of these sago palms and cycads re-sprout from the base when the tree trunk is cut down to extract starch. Banana and coconut were especially important and raphides or crystals of banana have been unearthed in Cameroon, W. Africa, demonstrating long distance transport of these plants, probably by Austronesian speaking sea traders from SE Asia.

Just when did agriculture begin? Well, chimpanzee bands are known to defend certain fruit trees in their territory. Is this agriculture? Prairie Dogs will weed the vegetation around their burrows, cutting inedible species with their teeth and letting the edible grow among their manure. Is this gardening?

Imagine root gatherers in the distant past, women and children digging edible roots, like sweet potato aka cassava in Central and South America, yams in Africa or wild taro in SE Asia. Sometimes the women would harvest all the tubers and take them away but at some point in time one of them would have cautioned the others, by showing and saying "Leave one tuber, or the leafy mother plant and more will grow back again." I call this passive gardening. This would not have been such a great mental leap. In tropical areas plants grow quickly and seem much more animated. Food gatherers return to their favourite spots again and again, year after year. Even elephants and bears do this. They have good memories.

At some point women would have moved tubers or whole plants from place to place and begun to clear away competing vegetation or weeds. Here the great realization happened, the needs of the plant: **Nurture nature and nature will nurture**. The first real gardens may have started this way or have sprouted from vegetable garbage. I saw this take place near Trinity Newfoundland from potato peelings at a roadside picnic spot. Chimps don't tend gardens but it may be that root agriculture is older than the human species. It is quite possible that *Homo erectus* practiced a sort of casual gathering and passive gardening.

Tending, defending or protecting valuable trees and bushes is, as mentioned, another form of agriculture, arboriculture, and the beginnings are lost in time. When modern humans or *Homo erectus* or *Australopithecus* took an interest in fruit or nut trees they were spreading the seeds and leaving their dung, urine and other organic wastes in the area. This begins an informal orchard, probably near traditional campsites. They would have defended the orchards from other bands and other animals. They may have removed vines from the trees and snapped off competing saplings. They certainly trampled weeds with their gathering activities. In time, fruits and nut trees co-evolve with those who care for them, becoming larger, often less fibrous, more colorful with more flavour. Family bands still live this way in tropical forests, especially in Amazonas. There need never have been intentional planting of these trees. They do it on their own. A recent book discusses jungle orchards and managed forests (Charles c. Mann, 1491: New revelations of the Americas before Columbus.)

Joseph Campbell first pointed me toward ancient agriculture in New Guinea and since then I have found a wonderful book that also discusses earliest myths/human history, Stephen Oppenheimer's **Eden in the East**. Study it. Oppenheimer means us to take the title seriously. I found another book pointing in the same direction, and much earlier, **The Book of Enoch**

discussed at length in these web addresses austronesian@yahoogroups.com and austric@yahhoogroups.com. Happy reading.

Next time you dig potatoes or pick apples this links you to ancient tropical agriculture, the art and science of gardening.

Calling all Wildflower Lovers

Would you like to help track climate change across our province by doing something you really enjoy - watching wildflowers? If so Plantwatch Newfoundland and Labrador needs you!!

Plantwatch Newfoundland and Labrador is about to embark on its ninth season. This program is one of several NatureWatch programs sponsored by the Canadian Nature Federation and the Ecological Monitoring Assessment Network of Environment Canada.

Early blooming plant species have been shown to be good indicators of changes in climate. Nature lovers of all ages can become citizen scientists and help collect this important data.
This is as easy as going for a walk in your favorite spot and noting the dates plants such as starflower and bunchberry bloom. When you have collected your blooming dates the data can be sent to your provincial coordinator to be entered in the database or you can enter your data directly on the national web site.

Presently we have 20 dedicated observers around the province **but we need more!!!** Your participation is very important whether you make one observation or many.

If you are interested in participating in this program and would like a copy of our guide and data entry form please contact Madonna Bishop at MUN Botanical Garden (709) 737-3328, email at mbishop@mun.ca. or visit the Plantwatch website at www.naturewatch.ca

Happy Plantwatching!

Madonna Bishop

Taraxacum vulgare, one of the plants being followed in PlantWatch. Photo by Todd Boland