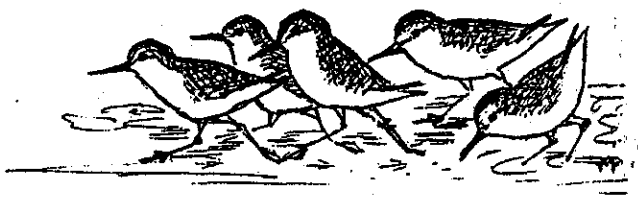
Harry Bogan

BLOMIDON NATURALISTS SOCIETY NEWSLETTER

VOLUME 14
NUMBER 2
JUNE 1987



SOCIETY NEWS

BNS Autumn - Early Winter Programme

MONDAY EVENING MEETINGS: All meetings will start at 7:30 p.m. and will be held in Room 244 of the Beveridge Arts Centre at Acadia University. All lectures and field trips are open to the public and BNS members are encouraged to bring friends and neighbours. Any changes in the date, time or subject of meetings are announced on posters, the Kings Kable notice board and in The Kentville Advertiser and The Hants Journal.

1. September 14 -- Carl Haycock, a researcher from Brier Island, N.S., will give our first lecture of the 1987-1988 season on the topic of whales. This meeting is scheduled one week earlier than the normal meeting time to prepare us for the "whale-watching" field trip on September 19, 1987. (See Field Trips.)

2. October 19 -- Bob Bancroft, Regional Biologist, Nova Scotia Department of Lands and Forests, Antigonish, will speak on "Wildlife and Woodlots".

3. November 16 -- John Gilhen, a Curator at the Nova Scotia Museum, Halifax, will talk about "Amphibians and Reptiles of Nova Scotia".

4. December 14 -- to be announced.

5. January 18 -- to be announced.

CONTENTS

The BNS Newsletter is published on equinoxes and solstices.

Editors: Jean Timpa, George and Margaret Alliston
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"The primary objective of the Society shall be to encourage and develop in its members an understanding and appreciation of nature. For the purpose of the Society, the word 'nature' will be interpreted broadly and shall include the rocks, plants, animals, water, air, and stars."

from the BNS constitution

The Blomidon Naturalists Society is an Affiliated Member of the Canadian Nature Federation.

Field Trips

Unless otherwise noted, all times are given for meeting at the Gym parking lot of Acadia University. Morning trips sometimes extend into the afternoon so you may wish to bring lunch. Leaders' telephone numbers are included to allow those without access to local news to confirm trips.

1. Saturday, July 25, 1:30 p.m. -- Mud Lake Bog to look for orchids, etc. Led by Bernard Forsythe (542-2427) and Jim Wolford (542-7650).

2. Tuesday, August 4, 8:00 p.m. -- an evening field trip to see Chimney Swifts and Bats. Leaders - Tom Herman (542-7607) and Jim Wolford (542-7650). Inclement weather date - the following night.

3. Sunday, August 9, 12:45p.m. or 1:00 p.m. at the Grand Pre Park parking lot -- a combined trip of the Nova Scotia Bird Society and Blomidon Naturalists Society to see shorebirds with Jim Wolford (542-7650).

4. Wednesday, August 12, -- stars and the Perseid meteor shower with Sherman Williams. Sponsored by the Wolfville Recreation Department. Call 542-2400 for preregistration and definite times and places. The trip will be held the following night if it is overcast on August 12th.

5. Saturday, August 15, 1:00 p.m. -- New Ross area and snakes with Chris Ross and Robin and Connie Meister. Rain date: Sunday, August 16. Jim Wolford (542-7650) will be at the Acadia parking lot on Saturday to decide whether we go or not.

6. Sunday, September 13, 8:30 a.m. or 9:00 a.m. at the end of the Scots Bay road -- Cape Split geology with George Stevens. All day. Bring lunches to carry and comfortable footwear. If necessary, confirm with Jim Wolford (542-7650).

7. Saturday, September 19, -- Brier Island Whale and Seabird Cruise led by Carl Haycock. (See meeting of September 14th.) The four-hour trips, which cost $30.00 per person, leave daily at 7:30 a.m. and 1:30 p.m. Call 839-2995 for necessary reservations and allow at least three hours travel time from Wolfville to Brier Island. Anyone wishing to go on the BNS trip should make reservations for Saturday, September 19th at 1:30 p.m. and meet at the Acadia Gym parking lot at 9:00 a.m.

8. Sunday, September 20, 11:15 a.m. or 11:30 a.m. at the Grand Pre parking lot -- Nova Scotia Bird Society/Blomidon Naturalists Society trip to see shorebirds with Jim Wolford (542-7650).

9. Wednesday, September 23, 7:45 p.m. or 8:00 p.m. at the Grand Pre parking lot -- autumn skies with Roy Bishop (542-3992), Sherman Williams (542-5104) and Larry Bogan (678-0446). Trip will be rescheduled for Thursday, September 24, if skies are overcast on the 23rd.

10. Saturday, September 26, 1:00 p.m. or 1:30 p.m. at the Kentville Research Station picnic area. Mushrooms with Dr. Ken Harrison (678-4890) and Ken Harrison, Jr. Rain date: September 27th.

11. Sunday, October 4, 9:00 a.m. -- "Labrador Castle", a scenic outcrop of granite, near Chester with Julie Sircom (542-2446). All day. Bring a lunch to carry.

12. Saturday, October 17, 1:30 p.m. -- Fossils at Newport Landing/Avondale with Mark Pulsifer (678-9597).

Acknowledgements

Our sincere thanks this time to:

our speakers: Professor Sherman Bleakney, Randy D. Milton and Gary Saunders who enlightened and entertained us about Australia and New Zealand, the birds of rural Indonesia and the Gander River, Newfoundland, respectively;

our field trip leaders: Sherman Bleakney, Bernard Forsythe, Tom Herman, Jean Timpa, Sherman Williams and Jim Wolford;

Judy Tufts and Larry Bogan for writing field trip reports thus sparing the leaders the responsibility;

everyone who helped produce this Newsletter;

Rachel Erskine for supplying refreshments for our meetings and to those who serve them.

SOCIETY BUSINESS

BNS Newsletter Deadline - September 21, 1987

The Newsletter is a forum for the dissemination of information among Society members and all members are urged to contribute. Articles, reports, letters to the editor, poetry, sightings, trivia, jokes, etc., are all welcomed.

Trivial Tidbits of Local Natural History is selected, compiled and edited by Jim Wolford. Giving or sending Jim a written list of your observations in chronological order would greatly simplify his task. Jim's address is:

Biology Department
Acadia University
Wolfville, N.S. B0P 1X0

Last-minute observations can be called in to 542-2201, ext. 334 (leave a message).

All other contributions to the Newsletter should be sent or given to:

Jean Timpa
P.O. Box 1382
Wolfville, N.S. B0P 1X0

or to other members of the BNS executive. Please double space all contributions.

Field trip reports are included in the Newsletter to preserve a record of Society activities. Currently a few members write most of these reports. Other members are encouraged to share this responsibility. If you are willing to write one of these reports, please notify the trip leader at the beginning of the trip. Your contribution will be most appreciated.

Membership and Fees

To cover the increased costs of printing and mailing the Newsletter, effective immediately, annual membership fees for adults in the Blomidon Naturalists Society are $7.00 per person. Fees for those under sixteen remain $1.00. Each member receives four issues yearly of this Newsletter. Membership is not essential to attend either meetings or field trips; guests are always welcome at these functions.

Please use the form included in this Newsletter to pay your 1987-1988 fees.

The Robie Tufts Young Naturalists Award

The Robie Tufts Young Naturalists Award was established by the Blomidon Naturalists Society in 1983, in memory of Dr. Robie Tufts, to encourage an interest in natural history. Winners have been:

1984	Tammy Ashley of Newtonville
1985	Paul Fairclough of Coldbrook
1986	Kasia Muldner of Wolfville
	Sean Timpa of Wolfville.

Any resident of Kings County, fifteen years of age or younger, may enter the competition. Projects entered may cover any subject concerning natural history: for example, a wildflower collection, descriptions of local bird observations, an essay on a natural history subject, a project describing the life cycle of insects, a geological collection, etc. The applicant should display an ongoing interest in the subject.

Questions concerning the competition should be directed to:

Mr. James Wolford
President,
Blomidon Naturalists Society,
P.O. Box 127
Wolfville, N.S. B0P 1X0
Telephone: 542-2201 ext 391
or ext 334,

or any member of the BNS Executive.

Completed entries should be submitted by mail or in person to the President, Blomidon Naturalists Society, by August 31, 1987.

Entries will be judged by the Executive Committee of the Society and the award(s) presented at the annual meeting in October. The prize will be one year's membership in the Society and a field guide of the recipient's choice.

Members of the Society are asked to encourage young people to enter the competition.

FIELD TRIP REPORTS

Canada Goose Flypast at Wellington Dyke
Led by Dr. Sherman Bleakney
April 7, 1987

by Judy Tufts
Wolfville, N.S.

Thirty-five members stood in clusters along the side of the road near Wellington Dyke (north of Port Williams) awaiting the wonderful spectacle of Canada geese coming in from their daytime feeding grounds to rest for the night in the marshes at the mouth of the Canard River. The time was 7:30 p.m. - cool with overcast skies; earlier lingering rain showers and fog had finally dissipated. Around us one could smell the wet earth and vegetation as the evening air grew cooler. We welcomed the warmth of thick sweaters and jackets as we searched the grey skies to the west of us for the first signs of returning geese. Would we hear the familiar "honking" calls first, or would it be tell-tale "specks" in the sky, we wondered?

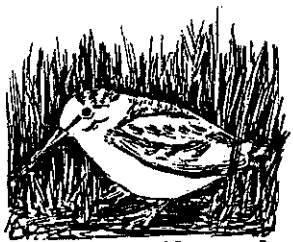
While we waited, American black ducks and teal flew by, hurrying on their way as twilight approached. Suddenly on the horizon came eleven large specks flying in beautiful unison, winging eastwards, easily recognized as Canada geese, their bodies silhouetted against the evening sky. More geese followed. By now one could feel the ripple of excitement through the group of spectators as each flight of geese, be it large or small, approached the Dyke area.

Some of the flocks were near 'V' or open 'J' formations, their leaders changing in mid-flight; others straggled along in untidy "bunches" with individuals shuffling positions

frequently. Now we could hear the geese - the wonderful sound of their honking - "contact calls" made to each other in flight or to identify their presence to others of their kind. As they passed overhead with graceful, steady wing-beats, the rhythmic "whistling"/swishing sound could be heard clearly as their sturdy wings beat the air. One could feel the magnificence of nature at these moments.

As the geese approached the Dyke area, some of the birds were seen to "tumble" downwards (much as a common raven does), as if "in play", then quickly regain height before dropping down easily once more - out of sight, behind the Dyke with the rest of their groups into the marsh beyond. About 500 Canada geese took part in this flypast before darkness fell.

We left contented with the evening's offerings - the echoing sounds of honking calls lingering in the night air and visions in our heads of the splendour of those beautiful feathered bodies flying overhead. We had been a "captive" audience.



An Evening of Owls and Woodcock
April 21, 1987

by Bernard Forsythe
Wolfville, N.S.

Over 40 people in 13 vehicles played follow-the-leader in an attempt to locate some of our nocturnal birds on this warm spring evening. We spent an hour or so before the sun went down on the Grand Pre Dykes where a Short-eared Owl was flushed showing us all its mothlike flight. A Common Raven and several American Crows joined the Owl for a short time and the resulting chase gave us a good size-comparison between these species.

At dusk we headed for the Greenfield and Lumsden area. Stops were made to try and hear the courtship flights of American Woodcock and Common Snipe. I had heard both these species the previous week but for some unknown reason (to me, that is), they were not active on this evening. At Lumsden, where I had been hearing a pair of Great Horned Owls this spring, we managed to excite one of the local dogs but nothing was heard from the Great Horned Owls. They had been visiting one of my artificial platforms but did not lay eggs, probably because of the shortage of snowshoe hares in the area. The last try for owls was at Hell's Gate where a pair of Barred Owls were nesting in one of my nest boxes. We walked into a stand of mature hemlock and pine where I tried my imitation of Barred Owls calling. Before long both adult Owls were answering from high in the nearby trees. The young people with us found it amusing to hear a grown man trying to sound like an owl.

On the way back to Wolfville, some of us stopped at one of Jim Wolford's favorite frog ponds where he showed us the spotted salamanders and spring peepers that breed in its cold, spring-fed water. It was a nice ending for the large group that turned out to see and hear some of our interesting night creatures.

Local Birds
April 26, 1987

by Jim Wolford
Wolfville, N.S.

This joint activity of the Nova Scotia Bird Society and the Blomidon Naturalists Society attracted about 40 people in 20 cars on this cool but sunny day. By late afternoon my sunburn was keeping me quite warm.

In the Grand Pre area our caravan saw several red-throated loons, two northern harriers and 175 brant. In late morning we made a "pit-stop" at Acadia University's Biology Building for its plumbing facilities. Then at the north edge of the Acadia campus we viewed an active common raven nest in a small clump of pines, where a few American goldfinches were foraging at the open pine cones.

We had our lunches at Canard Poultry Pond where we saw a male wood duck, three American wigeon, one blue-winged teal, 16 ring-necked ducks, several green-winged teal and American black ducks, 25 tree swallows, one early barn swallow and a very beautiful mourning cloak butterfly basking on some willow catkins.

After lunch we caravanned to Canning, Porter's Point, the Canard Valley and Starr's Point. Birds noted included only about 25 Canada geese, four red-breasted mergansers, one mallard, three American kestrels and 20 more tree swallows.

While at Hennigar's Market for ice cream cones, we viewed basking painted turtles and one mourning dove.

Finally, at Cyril Coldwell's farm at Gaspereau, the female great horned owl was still on the nest-platform in his front yard and, in his orchard, we spotted another great horned owl trotting about on the ground. Cyril suspects that this released, but crippled, owl is this year's mate of the owl on the platform.

My species list for the day totalled 37.

Cape Split Hike
May 9, 1987

by Sherman Williams
Avonport, N.S.

Excellent weather provided ideal conditions for the group of 45 hikers and me as we headed up the trail for Cape Split.

This trip was timed so that we might enjoy the bonus of seeing the spring flowers that appear before the leaves of the hardwoods block off the sunlight. Before one reaches the hardwoods, the trail angles up through a younger section of predominantly evergreen forest. This part of the hike offered an excellent opportunity for us to hear the songs of some spring birds. Featured were the white-throated sparrow, hermit thrush, ruby-crowned kinglet and, especially, the winter wren whose clear notes flowed like a little stream. Most warblers had not yet arrived; however, the yellow-rumped warbler was quite visible and audible.

As we progressed along the trail, spruce and fir trees became less evident; larger birches and maples were becoming the dominant species. The sunlight was brighter. The leaves on the hardwoods had only begun to unfold and were still small, delicate bits of green on the ends of branches. As our group panted up the last switch-back on the trail, we arrived at the "old, hollow, yellow birch" which officially marks one's arrival in the land of spring beauties.

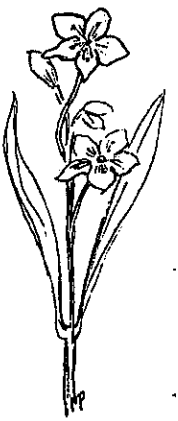
Truly, at this time of year, the spring beauty is "queen of the hardwood forest". The delicate blooms of this member of the Purslane family literally formed floral carpets on the ground beneath the trees.

A fair amount of excitement was caused by the clumps of Dutchman's-breeches and purple trillium that were also just nicely in bloom.

The rich hardwoods through which a large part of the Cape Split trail passes is also home to many species of ferns. This was the right time to see them at their true "fiddlehead" stage. Included among them was the fiddlehead (ostrich fern) that has become an epicurean delight.

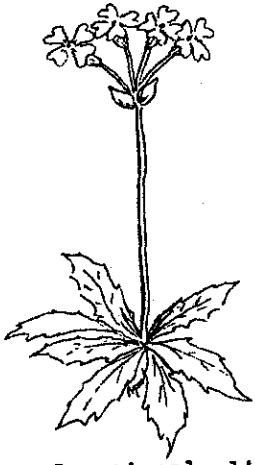
A precipitous drop-off at the side of the trail (that gave some parents an anxious moment) announced that the Split was not far ahead. Minutes later the trees ended abruptly and we arrived at the grassy dome that overlooks Cape Split! Each one found a place to his or her liking and sat down to rest and enjoy some food, drink and the magnificent view.

At this time of year, the eroding rocks of the ancient lava flows we call Cape Split are the centre of vital activity. Great black-backed gulls and double-crested cormorants could be seen attending to their nests on top of the isolated rocky prominences. Herring gulls were seen occupying nests on the cliff ledges. On the water below the Split several black guillemots were swimming and diving.



We began the return hike by taking the scenic, more rugged trail that leads along the lower, Scots Bay, side of the peninsula. This part of the trail gives access to the beach at Little Split Cove. Several hikers of our group made the descent to the beach while others chose to rest on the trail above. Some of the younger members took off their socks and shoes and treated thir feet to a dip in the very cool Bay of Fundy water.

The climb was completed from the beach to the point where we were once again on the main "Split Trail". From here, we more or less split up into smaller groups and hiked back to the parking lot at a pace that suited individual interests and energy. On our return trip along the trail, a porcupine conveniently put in an appearance as a final point of interest.



Delaps Cove Trail
May 24, 1987

by Bernard Forsythe
Wolfville, N.S.

Occasional light showers did not dampen the spirits of the eight people who enjoyed a leisurely hike along the 12 km wilderness trail at Delaps Cove. Frequent stops were made to listen and try to spot the many warblers, finches thrushes and sparrows in the area. American Redstart, Magnolia Warbler and the Blackburnian Warbler, with its flaming orange throat, were some of the warblers seen along with the Solitary Vireo. For me, the most interesting bird of the trip was the Pine Grosbeak. One of the several observed made a half-hearted attempt at singing. Pine Grosbeaks are seldom seen at this time of year unless one gets away from settled areas. The only seabird, other than a few gulls, was an immature Northern Gannet that Jim Wolford spotted.

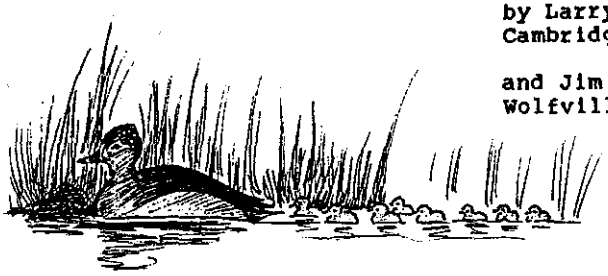
A lot of interest was shown in the plants of the area. There were a great variety of violets at their best while painted trillium and clintonia were beginning to open. A search was on for the tiny flowers of the golden-saxifrage and it was soon found at several locations. Indian cucumber-root, rose twisted-stalk and one of our saprophytic orchids, early coralroot, were a few other plants carefully examined. On the narrow strip of sod along the shore Jim found a beautiful little plant that was new to me - bird's-eye primrose. Wild plants fill in very nicely between lulls in bird activity.

The Bay of Fundy was quieter than usual providing us with an optical illusion. The Princess of Acadia appeared to be floating in the sky as it headed for Digby. There was a lot of discussion of the things we were finding with no thought of time so that it was late when we arrived back at our cars. For those who do not want to spend a whole day, the trail is set up so that one could enjoy a part of it, the Bohaker Trail, in a short time. I would highly recommend this trip at any time of year.

Yellow Lady's Slippers
June 20, 1987

by Larry Bogan
Cambridge Station, N.S.

and Jim Wolford
Wolfville, N.S.

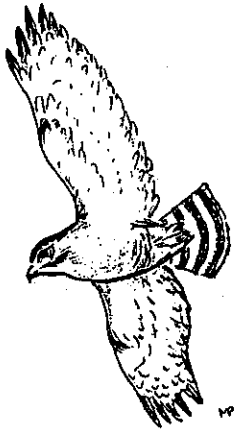


About 15 members and visitors met at Smiley's Provincial Park and had a relaxed picnic in the sun beside the clear waters of the Meander River. On the way from Wolfville, many of us saw a female Ring-necked Duck with her brood of nine ducklings (approx. 3-4 days old) paddling briskly by the reeds in Woolaver's Pond near Brooklyn. At the other end of the pond were three male Ring-necks ignoring the female. At the park we saw a Chestnut-sided Warbler, a Spotted Sandpiper and a porcupine with a young one.

Shelley Porter and Sue Meek led us from the park to a bridge across the Herbert River near Scotch Village. Here most of us bushwhacked up river along the north bank to a scree slope where several clumps of Yellow Lady's Slippers were in full bloom. The rocks contained abundant fossil brachiopods. Growing in the area was also plenty of Poison Ivy, some of which was in bloom. There were lots of fish in the river and several Common Shiners were collected with nets. Many were pretty with reddish-orange on their fins, while one male had pointy bumps all over his head. Sue, Shelley and John Adams caught damselflies, mostly *Calopteryx aquabilis*, which have black-tipped wings and brilliant iridescent green abdomens. We were able to observe some courtship activity, mating, and egg laying by these flies. The latter activity took place underwater on a Vallisneria leaf.

This river habitat is a rich one. The Herbert River water is stained dark by tannins as copmpared to the clear Meander. Here also, on a gravel bar in the river, we found a Spotted Sandpiper with three young chicks. We waded the river and walked back to the bridge through a freshly cut hay field. The groves of trees along the bank contained a good variety of trees (ironwood, red maple, sugar maple, beech, white birch, red oak, balsam fir, hemlock, spruce, cherry and ash) as well as several types of ferns. At least two groundhog holes were found and one had a resident gazing out. Blue violets were still in bloom and there was a pretty collection of several colors of columbine. In the low, wet areas of the field grew the small, blue-violet grass flowers.

Everyone talked for a while by the caravan of cars parked along the road while feet partially dried in the pleasant, hot sunshine. Poplar Grove has a much better show of Yellow Lady's Slippers and has easier walking but the river environment had its own variety of rewards.



Atlas Day at Hillsburn
July 4, 1987

by Jean Timpa
Wolfville, N.S.

The weather reports were ominous and the skies grey at 6:00 a.m. but the lack of wind, high overcast and warmth somehow led me to believe that we should go ahead with the atlassing. It was definitely the right choice as a better day could not have been had by all. The drizzle started finally about 3:30; by that time, we were all pretty well tuckered out and pleased enough to sit in the coziness of Dave's Seafood Diner in Hillsburn to refresh ourselves with hot coffee, lobster burgers, ice cream and like temptations while we compiled the results of our day's observations.

Theoretically there should be 70 species for a substantial amount of forest of various compositions and ages, ten species for three very picturesque settlements, five species for small marshy areas and five species for coastline that isn't just rocky cliff for a total of 90 species. However, two-thirds of the square is salt water so we felt a more realistic figure would be 80 species.

In this blitz, plus another four hours Gini Proulx spent there scouting for us, we found Common Eider, Herring Gull and Great Black-backed Gull present but otherwise exhibiting no evidence of breeding. Fifty-five other species were placed in the possible, probable or confirmed (21!) categories so we felt we'd had a very successful start to this priority square. I know several people who live nearby are now interested in exploring it further. A total of 40 hours has been spent in this square so far.

One of the highlights of the day came before 9:00 a.m. when Sharon Hawboldt found a very vocal, but shy, hawk at the edge of a busy gravel pit. When I went in with Sharon several hours later I not only heard the bird but spied the nest in a mature yellow birch tree. However, the bird did not give me good enough viewing to identify it. Near the end of the afternoon, Jim Wolford was able to confirm for us that this was none other than a Broad-winged Hawk!

Many thanks to the 15 atlassers who came to this blitz. I don't know why someone hasn't claimed this square, especially with those delicious lobster burgers so handy!

Summer Astronomical Highlights - 1987

by Larry Bogan
Cambridge Station, N.S.

Enjoying the splendours of the night skies during the summer is not always easy. Although the weather is warm enough to allow comfortable observing and there tend to be more cloudless skies during this part of the year, we also have very few hours of darkness. In late June, dark skies occur from about 11:00 p.m. until 3:00 a.m. (ADT) and increase to 9:30 p.m. to 4:30 a.m. by late August. An additional summertime difficulty exists; the air in summer carries more moisture and skies are often hazy or foggy. Autumn is the ideal time to observe celestial objects; then the nights are longer yet warm enough to be comfortable and most of the ineteresting summer sky objects are still visible.

In 1987, as in every year, summer is the season to enjoy the grandeur of the Milky Way. The most interesting part is located near Saggitarius because the star clouds are densest here and there are more clusters and nebula. At this time of the year this constellation is just above the southern horizon. As you follow the Milky Way up through Cygnus at the zenith and on to Perseus, just above the northern horizon, it becomes less dense. Look for the dark clouds or rifts in the bright star clouds in Cygnus and Aquila.

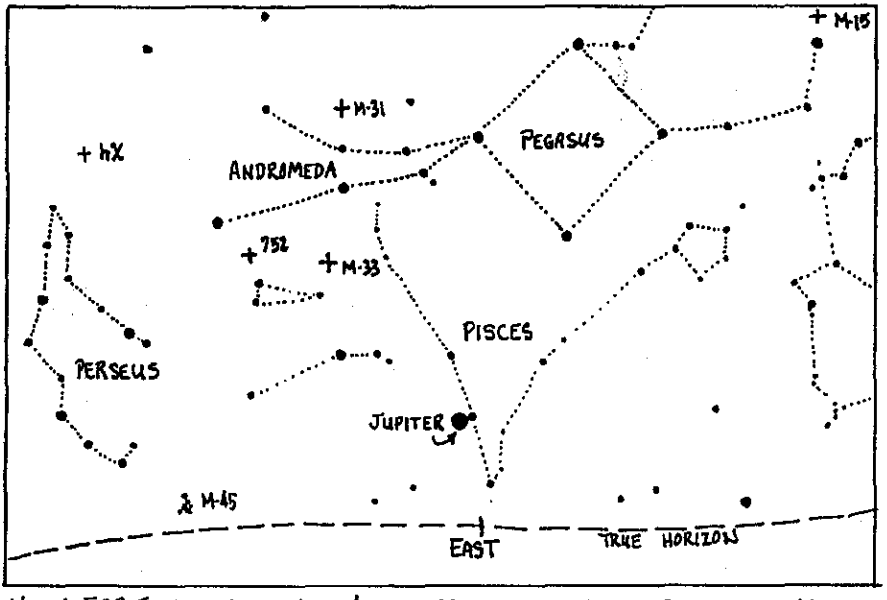
Pick a dark night to do your observing; it's well worth the effort to get away from the lights of our towns and NSPC yard lights. You may find the skies darker if you find a site up out of the Valley. On clear, still nights the air cools by radiating its heat into space, becomes denser and settles into the Valley; many times the temperature of this air is below the dew point and then haze and even fog covers the Valley. Up on the North and South Mountains, the air is warmer and clearer.

This year there is no Halley's Comet to track across the skies. Most of the celestial events during the summer are not unusual or spectacular and I refer you to the Observer's Handbook 1987 or to a 1987 almanac for a general listing of astronomical events. The planets are always changing position and this summer Saturn, Jupiter, Uranus and Neptune will be marching across the southern sky. Uranus and Neptune are not bright and are difficult to locate. (Use the Observer's Handbook 1987 and telescope or binoculars.) Venus and Mars are both in conjunction with the Sun in August and will not be visible during the summer.

Jupiter does not rise into the sky until midnight in late July. It is located in the constellation Pisces and is by far the brightest star in this region of the sky. Binoculars will enable you to see clearly the planetary disc plus Jupiter's four brightest satellites all in a straight line. A telescope will enable you to see several dark bands in the atmosphere of Jupiter and observe the flattening of the polar distance compared with the equatorial.

Each year around August 12, the Perseid meteor shower, usually the most interesting of the year, occurs. This year, however, the Moon is full on August 9 and will light up the sky such as to make only the brightest meteor tails visible.

Almost everyone has access to a pair of binoculars yet few train them on the heavens. Many of the interesting objects such as star clusters, globular clusters and galaxies are large in size and do not require the high magnification of a telescope to be seen. A good pair of binoculars will make many of these dim objects visible. On the accompanying star charts, marked (+), are some of the larger celestial objects that you can see with your binoculars.



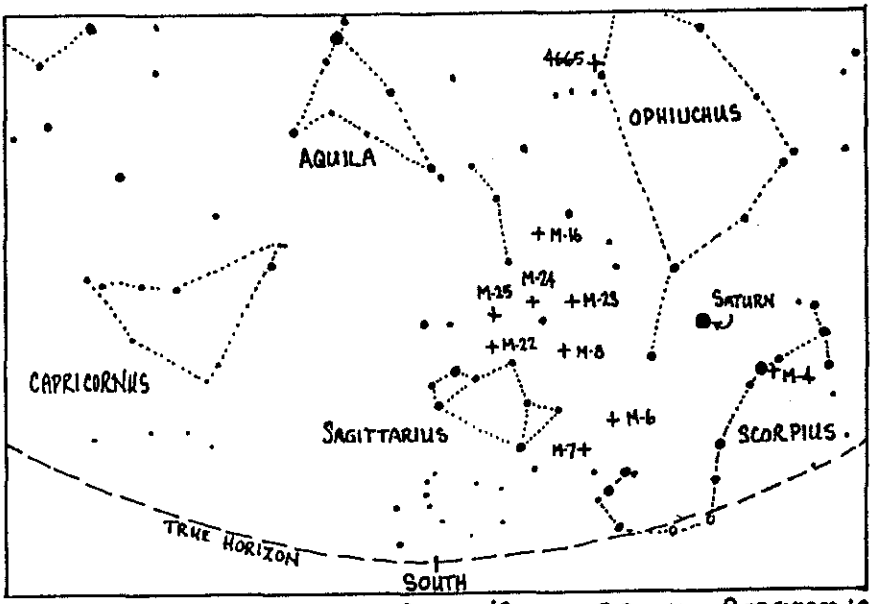
VIEW EAST AT 11 P.M. ADT AUGUST 18 or 9 P.M. ADT SEPTEMBER 18

Star Chart Facing East

Label	Type of Object	Description
M-15	globular cluster *	small fuzzy star
M-31	great Andromeda galaxy	nucleus of our neighbour
M-33	galaxy	dim face-on galaxy
M-45	star cluster, Pleiades	very bright cluster
h-X	double star cluster	beautiful field of stars
752	star cluster	100 dim stars

Star Chart Facing South

(Most of the following objects are concentrated in the Saggitarius, Ophiuchus, Scorpius region of the sky. This is such a rich area to scan with binoculars. You will undoubtedly see more objects than the ones listed here.)



VIEW SOUTH AT 10 P.M. ADT AUGUST 18 OR 8 P.M. ADT SEPTEMBER 18

Label	Type of Object	Description
M-4	globular cluster	large fuzzy star
M-6	cluster of 50 stars	as big as the Moon
M-7	cluster of 50 stars	brighter than M-6
M-8	gaseous nebula	fine object!
M-16	star cluster	stars in dim nebula
M-22	globular cluster	large fuzzy ball
M-23	large star cluster	over 100 stars
M-24	rich area of Milky Way	field of star dust
M-25	large star cluster	scattered stars
4665	cluster of 20 stars	large loose cluster

* Globular clusters are spherical collections of about 100,000 stars that are so distant that they cannot be seen individually with binoculars and hence appear as fuzzy stars or balls.

References for observing the sky using binoculars:

Bishop, R. (ed.) 1986. Observer's Handbook 1987. Royal Astronomical Society of Canada, Toronto.

Ridpath, I. and W. Tirion. 1985. The Night Sky. Collins Gem Guide, Collins, London.

FROM OTHER PUBLICATIONS

Dutch Elm Disease

Dutch Elm Disease (DED), which is almost always fatal to native as well as many introduced elm species, was first introduced into Nova Scotia in 1969. Since then communities throughout the Annapolis Valley have suffered tree losses and, despite attempts to control the disease, the incidence of infection is now reaching epidemic proportions. In Kings County alone nearly 2300 diseased elms have been removed since 1981.

The Wolfville Park and Tree Commission has recently requested property owners in Wolfville to monitor their elm trees and immediately report suspected infections to the Commission. The Commission has distributed to Wolfville property owners a pamphlet, published by Environment Canada, Forestry Service, outlining how to recognize and potentially control the disease.

So that BNS members throughout the Valley have access to this information, the following paragraphs have been reproduced from the pamphlet.

Early signs of trouble

Examine the lower trunk of your elm trees in the fall and early spring for red boring dust (a fine sawdust-like material) caught in the bottoms of bark fissures. This dust indicates the presence of native elm bark beetles under the bark. The presence of beetles does not necessarily mean your trees have DED, but does mean that they are in imminent danger of infection in the next growing season.

Where the **European elm bark beetle** occurs, small twigs on the ground under elms may indicate that these beetles have been feeding in large numbers, and may have caused infection.

When either of the above signs are present on your elms or those of your neighbour, be on the look-out throughout spring and summer for the following signs:

Signs of the disease

1. **Early signs**, from mid June to mid July. The leaves on one or more branches **wilt** (droop) and **curl**. Later they **shrivel** and turn **brown**. The brown, shrivelled leaves usually remain on the tree.

2. **Later signs**. Leaves on one or more branches become **yellow** and **droop** (flagging). Affected leaves drop prematurely. Leaves on succulent branches (suckers) or twigs, especially those growing out of the trunk, may wilt and turn brown.

3. Elms leaf out in the spring with **smaller** than normal leaves on one or more branches or over the entire tree. Some small branches may be dead. These conditions may mean that the tree was infected with DED the previous year, but too late for signs of the disease to appear in that year.

Later in the summer it is not possible to distinguish between autumn coloring and the late-season signs of DED.

It should be borne in mind that early signs may merge into late signs, so that both may be present at the same time.

Confirmation of the disease

For this it is necessary to take samples of living branches showing signs of the disease. Since these are usually high in the tree, sampling is best left to an arborist or person familiar with tree climbing. If DED is present the cut end of the branch will have a brown stain in the outer ring of wood. If the bark is peeled from the branch, the wood surface will show a pattern of brown streaks. For positive identification of DED the branch would have to be cultured.

How the disease kills trees

DED is caused by the fungus *Ceratocystis ulmi* (Buis.) C. Moreau. Tiny spores of the fungus carried by elm bark beetles rapidly spread through the water-conducting system of elm trees, causing wilting and death.

How the disease is spread

The disease is spread mainly by two species of elm bark beetles, the **native elm bark beetle**, *Hylurgopinus rufipes* (Eichh.), and an introduced species, the **smaller European elm bark beetle**, *Scolytus multistriatus* (Marsh.). The two insects can be identified from the **characteristic pattern of their galleries** on the surface of the wood. These insects breed in the bark of dead and dying elms. If these trees have DED, the emerging adults may carry spores of the fungus. These beetles fly to healthy trees to feed on the bark of branches. By this feeding DED spores are introduced into the water-conducting system, and the tree developes DED.

In addition, where elms grow close together, DED may possibly be passed from diseased to healthy elms by **root grafts**.

Control of DED

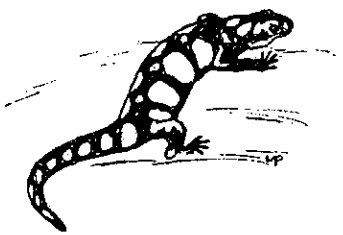
Research on methods of controlling DED is being carried out in a number of research centres. New methods are being developed. At present, control methods are aimed at both **prevention** and **control**. Prevention is of course better than cure.

Prevention starts with keeping elms **healthy, vigorous** and **properly pruned**. If the disease is already present in your area, **sanitation** is the most important preventive measure. This is the speedy removal (and burning or burying) of dead and dying elms, and is essential to prevent the buildup of beetle breeding material. If removal of bark from dead elms reveals the characteristic pattern of beetle galleries on the surface of the wood, this confirms the need for immediate removal and disposal of the tree. **This applies to areas both where DED is present and where its presence has not been confirmed.**

Preventive measures involving the use of chemical sprays or injection of chemicals may be prescribed,

If root grafts are suspected between diseased and healthy elms, consult a specialist. The root systems may have to be separated by trenching.

All tools used on diseased elms should be sterilized before use on healthy trees.



Volunteers Required for Severe Weather Watch Program

A Severe Weather Watch Program is being designed to help the Maritimes Weather Centre identify, monitor, and track severe localized summer storms and deliver prompt warning of these storms to the general public and concerned agencies. The program will be dependent upon the observations of many volunteer weather watchers located throughout the region reporting their observations (by collect telephone calls) directly to the Maritimes Weather Centre. Only severe weather events such as large hailstones, damaging winds, funnel-shaped clouds, etc. would be reported.

Volunteer weather watchers would not be expected to take any special action to spot storms but simply go about their regular business and, should a potentially hazardous storm be observed, then immediately report it to the Maritimes Weather Centre. Anyone can volunteer to participate in this program. Obviously people who are outdoors a great deal during their normal summer activities (naturalists?) would have the best chance of spotting a storm. If you wish to participate in this program, write to:

Severe Weather Watch Program
Atmospheric Environment Services
Environment Canada
1496 Bedford Highway
Bedford, N.S. B4A 1E5

You will be provided with more detailed information concerning the program and a registration form you must complete and return. By participating in this program, you can provide a valuable service to your community.

BLOMIDON NATURALISTS SOCIETY
1987 - 1988 Membership Fees

Please enclose a cheque or money order payable to "Blomidon Naturalists Society" and forward to:

Mrs. Judy Tufts
P.O. Box 1313
Wolfville, N.S. B0P 1X0

Number	Membership Classification	Price	Total
_____	Adult	$7.00	$_____
_____	Junior (less than 16 years old)	$1.00	$_____
		TOTAL	$_____

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