# The FEDERATION OF NOVA SCOTIA NATURALISTS

The FNSN is an umbrella group comprised of naturalist organizations from across Nova Scotia. We present a unified voice concerning natural history issues.

xccm	

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FNCN MEMDEDCHID.

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c/o Cape Breton Centre for Heritage and Science

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c/o R. Lauff, Box 4, Site 13, RR #7, Antigonish, NS B2G 2I.4

c/o N.S. Museum of Natural History, 1747 Summer St.

Halifax, NS B3H 3A6 http://ccn.cs.dal.ca/ Recreation/FieldNaturalists/fieldnat\_html

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c/o Carol Jacquard, Box 8A, RR #1, Tusket, NS

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is available in conjunction with memberships in the
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membership, available directly from the FNSN, entitles you to a quarterly newsletter and a
vote at the AGM. Please fill in the following information, include a chaque or money order
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The Editor, FNSN News, c/o 6360 Young Street, Halifax, NS B3L 2A1
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Federation of **Nova Scotia Naturalists** 

# NEWS

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Winter 1995-96

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Evernia prunastri Photo by: Ted Casselman, Cheverie, NS climbing a mountain in India. At 13,000 feet the tree line gave way to low shrubs and rocks. From my experience with lynx in Canada, I knew that the cat tracks I was following in the snow were made by a snow leopard. Reaching the summit at 15,000 feet, the tracks congregated at the entrance of a

small hut. Canadian lynx are more or less solitary creatures. But this same knowledge didn't seem to fit these cat tracks, since I could see lots of tracks going into the hut. My senses became totally alert. Suddenly some snow slid off the hut's roof, the sound echoing in all directions, causing my imagination to limit my perception; what I thought I was hearing and seeing caused me to

panic. But there was no danger. When I calmed down, I discovered that all the tracks were from the same cat and it wasn't even at home in it's man-made den. If I had known this beforehand, I wouldn't have panicked... perhaps.

It appears then, that our senses are not always dependable and our knowledge about the ever changing world is just that — ever changing; something accepted today can be rejected tomorrow. We have recently expanded our knowledge about the complexity and orderliness of our universe. We can now see the wholeness of time and space mentally. But does this knowledge change our perception, or limit it? Like the bird watchers, did their knowledge help or

hinder them? Let's look at perception.

This might imply that as we we need also to increase our

innocence to actually see clearly. Have you ever heard a phrase such as, "You know, I've been here a thousand times before but I never really saw the place", or "I finally saw him for the first time today, after knowing him for over twenty years". Innocent perception is opening the eyes and seeing that which is actually before us. Is it possible to increase or enhance our level of innocence? Let's see.

Years ago, while working as a surveyor's assistant, I discovered how important the angle of perception is. When you use a surveyor's transit you see only one angle at a time, and your vision is concentrated on a specific place. Through this concentration you can see clearly but... in a very limited way. So if concentration doesn't seem to increase innocence, and in turn perception, what does?

If we play, work and think with other natural beings, such as wild animals and their living environments, we won't become wild any more than we become the carrots that we eat. But we may become what these animals and their environments are; innocent creatures living together and sharing, consciously or unconsciously, each others lives.

#### **FNSN News**

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# $1996^{\text{AGM June 7-9}}$

The Annapolis Field Naturalists' Society is looking forward to the challenge of hosting the 1996 AGM of

the Federation of Nova Scotia Naturalists. Members are already hard at work lining up an interesting and informative program and working out the logistics for an exciting weekend of talks, walks, and social events. The full program will be circulated early in the new year, along with registration materials and information about accommodation and other amenities available in the region.

The Annapolis area is rich in history, both human and natural, and during the weekend we will provide many opportunities to explore the more noteworthy and fascinating natural places that our community has to offer. Some of the topics that we plan to explore during the weekend of informative walks and exhilarating walks include development of local wetlands as waterfowl habitat, tidal power and its ecological impacts, coastal erosion of salt marshes and what is being done to combat it and the status of the great whales in the Bay of Fundy. We are also looking into the possibility of guided cruises on the lower reaches of the Annapolis River. Many of the more scenic natural trails in the region have also been targeted for early morning walks focussing on birds, wildflowers, and nature photography. The inevitable business meeting of the FNSN will take place during the latter part of Saturday afternoon, providing an opportunity to hear about what the Federation has been doing recently and the challenges it will face in the coming year.

The Legion Social Centre in Annapolis Royal will be the principal venue for the weekend, with some events scheduled conveniently nearby. There are reasonably priced motels in the vicinity, a variety of bed and breakfast establishments, nearby campgrounds and as usual billeting will be arranged with local families for as many visitors as possible.

**FNSN News** 

## For registration information contact:

FNSN AGM c/o AFNS, PO Box 576 Annapolis Royal, NS BOS 1A0

Perception

increase our knowledge

degree of innocence.

# Nature Trust Accepts First Land Donation

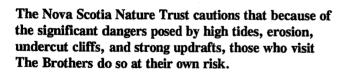
......from Natural Landscapes, the newsletter of the Nova Scotia Nature Trust

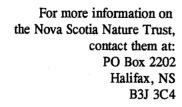
he Nova Scotia Nature Trust recently accepted its first donation of land from Kentville resident Jack Herbin.

The Brothers Islands consist of two steep-sided. basalt islands in the Bay of Fundy near Parrsboro. The islands are significant not only because of the relative scarcity of coastal islands in the upper Bay of Fundy and the growing pressure to "develop" coastal islands in Nova Scotia, but also because they harbour an oldgrowth hardwood forest, rare plants including purple trillium, and Canada yew, and nesting bald eagles. common eiders, black guillemots, and gulls. The islands also provide suitable nesting cliffs for peregrine falcons, which have shown signs of recovery in the upper bay.



The Nova Scotia Nature Trust wishes to extend its deepest gratitude to Jack Herbin, who came forward to generously offer the islands. Mr. Herbin continues a family tradition of generosity which has previously included the family's donation of land upon which Grand Pre National Historic Site now sits. The Nature Trust is also grateful to Charles Hardy and Associates Ltd. for donation of the property appraisal for this project.





Home Page of the Nova Scotia Nature Trust:

http://www.cfn.cs.dal.ca/environment/fnsn/hp-nsnt.html

#### FEDERATION OF NOVA SCOTIA NATURALISTS

# TREASURER'S REPORT

01 April 1994 to 31 March 1995

Balance as of 31 Ma	urch 1994 (A) \$ 41,078.46
Funds Received:	
World Wildlife l	Fund (NS, NB Endangered Spaces) \$ 30,000.00
NS Sport & Rec	reation Commission Grant 1,000.00
	d Spaces Contribution (for NS Nature Trust) 1,500.00
Memberships:	
Organization	n 545.00
Federate	
Individual .	
	nterest
	GM's surplus (from EMFN)
	d <b>(B)</b>
	venue, (A+B)
Disbursements:	
Endangered Space	ces Contract
	Memberships (in NCC, NSEN & NSTF) 90.00
	er & Pamphlet 1,164.03
	s Expenses (Travel, Postage, Phone) 236.46
	Service Charges + New Cheques
	ebit Adjustment
	sident
	Stock Companies (Copies + Search) 9.50
NS Dept. of Nat	ural Resources (to designate
	Conservation Easement Act)
	n Stewart toward lon-tern debt
	s: (C)
Balance in Account	on 31 March 1995 (A+B-C) \$ 48.779.19
Funds committed to I	Endangered Spaces Campaign \$ 45,641.36
Balance Remaining	for Federation Business \$3,137.83
Submitted by Jim Wo	olford
Treasurer, Sept. 1, 19	
•	

Raising Volunteers Needed. In response to our request for volunteers for this committee, we have received two volunteers. We are still looking for additional members for this committee. If you are interested, please contact Ruth Newell, at 902-542-2201 ext. 1335 or 1334 or at the Biology Dept., Acadia University, Wolfville, NS BOP 1X0

We have written a letter to the Honourable Don Downe, Minister, NS Department of Natural Resources expressing our concern regarding the application under review to double the size of the aquaculture operation adjacent of the main tern colony on North Brothers Island.

We state:

"We strongly believe that approving this application now would be inadvisable. With the establishment of the existing aquaculture operation, a risk has been taken with a third of the Canadian population of roseate terns."

In this letter we have also mentioned the newly found roseate tern colony on Country Island, Guysborough County. We express our concern regarding the pipeline construction and operations associated with offshore development which will come ashore in Country Harbour. We note that we will support the efforts of DNR to ensure that this development will have a minimal impact on this very important newly found colony.

Doug Linzey has reviewed a Draft Document for discussion: "Minerals a New Policy for Nova Scotia." 1995 prepared by the NS Department of Natural Resources. Based on his recommendations, we are preparing a response to DNR expressing our concerns, particularly that we do not approve of mining on any potential protected area sites.

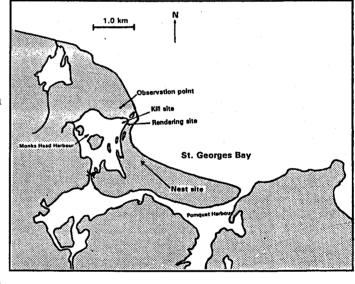
Internet We are on the Internet! Our address is: http://ccn.cs.dal.ca//environment/fnsn/hp-fnsn.html

HFN The Halifax Field Naturalists are preparing a butterfly check list for Nova Scotia. The list will be available from the HFN and the Nova Scotia Museum of Natural History early in the new year. There will be more on this project in the Spring 1996 issue of FNSN News. Look for details on a count day!

The eagle spent the next hour and a half plucking the heron. It frequently paused, sometimes it looked around, but it did not show signs of agitation when crows (Corvus brachyrhynchos) or other birds flew near. Interestingly, the eagle never appeared eat any of its prey while it was being plucked. Upon arrival of the eagle's mate (a noticeably larger bird, therefore in all likelihood, the female), the male stepped aside. The female did no plucking, she removed strips of meat and with no apparent rush, ate them. The first of the two juveniles from this year's nesting flew in 10 minutes later, while the second came in after an hour. Upon their arrival, each immediately started to eat. Finally, just after 12:30, the male started to feed at his own kill. Within the next half hour, both adults flew off to separate perches. One went to a nearby spruce with an unidentifiable piece of the heron, the other flew to the nest with a wing; both continued to feed. Even after the young had fledged, the adults routinely could be seen feeding at the nest. In some of those cases, one or both of the young would also join in and feed.

Both iuveniles continued to feed at the kill site for another hour or so. When they left (and I confirmed the parents were also no longer around). I grabbed my camera gear and field book and walked down

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to the site. Where the male had swam ashore and plucked the bird, I found, naturally enough, feathers. Lots of feathers. The lighter, down feathers had been taken by the wind and most were adorning the grass like ornaments. The heavier tail and wing feathers lay scattered in an area 2-3m in diameter. A short distance away lay what remained of the heron - both legs and one wing. The only components of the right leg remaining were the foot and the leg up to the knee. The bones were essentially cleaned of meat and skin--skin only remained over part of the foot (where extremely little meat exists in most birds). The femur (upper leg bone) was present with the remains of the left leg and it was equally well cleaned. The entire left wing, complete with the shoulder girdle was the only other piece left in the area. It too, was cleaned of essentially all the meat. Skin only remained over the bones of the wingtip,

**FNSN News** 

another area of essentially no meat. The four eagles left precious little for scavengers. This contrasts somewhat with the previously mentioned account of an eagle killing an Osprey (MacDonald and Seymour, 1994). Parts of the digestive tract, one wing, the head, and the Osprey's prey (a white perch, *Morone americana*) were not touched. However, the authors did not monitor the kill to find out if the eagle (or its mate, which had participated in the chase) came back to finish the rest.

Actually being able to witness predation upon birds is rather rare for most people. Even if one operates a feeder and lives in a relatively treed area, one can still only expect to see on average, one successful predation per winter (Dunn and Tessaglia, 1993). Bearing this in mind, I feel rather fortunate to have witnessed this particular event, essentially from start to finish, and to have also learned that the "eagle as a scavenger" image is not entirely true for this top of the food chain predator.

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#### From the Board of Directors

September 23 meeting of the Board of Directors was hosted by the Eastern Mainland Field Naturalists in Antigonish. An overnight meeting was arranged and some members took advantage of Friday and Saturday night billets. After the business meeting on Saturday, a field to Pomquet Beach was held. Although raining, the hardy troop did not despair and spent a few hours on a guided visit by Randy Lauff. The habitat protected by this Park is fascinating itself. It is essentially a sand bar colonized by pines. grasses, bearberry, juniper, oak, Hawthorne (several species) and various herbaceous plants. Board members were interested to identify a late piping plover, a large group of vellow-ramped warblers, a large colony of shaggy mane mushrooms, poison ivv. and bastard toad flax. The poison ivv was spectacular in full brilliant red foliage with well-berried stems to the likes not seen before by some of the most experienced naturalists. What impressed several group members was the carpet of bearberry that covered entire areas. After the field trip, a potluck supper had been organised by the host group which ended a great day.

On Sunday, thanks to Mae and Fred Goring, a trimaran trip was provided to Antigonish Harbour which resulted in several excellent sitings of bald eagles. Also noted were common terns and gulls - mostly Bonapartes. Very special thanks is extended to all involved in organizing the events, especially Randy Lauff, Mae and Fred Goring, and those who provided food and billets.

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The FNSN is represented on the board of the Nova Scotia Trails Federation (NSF) by Reg Newell who provided a written report to our latest board meeting. Reg reports he attended the November 16, 1995 board of directors meeting of the NSTF and that the organization is alive and well and that their mandate has extended far beyond the original concept of Rails to Trails. The NSTF now includes groups involved in a variety of trails including the Trans Canada Trail Association. The NSTF board is made up of a number of interest groups including snowmobile, cross-country ski, canoe, bicycle, and other recreation groups, and the Hostelling Association. They are in the process of extending their membership to individuals. Although there are a number of trials nearing completion, the process has been held up because of the difficulty in obtaining liability insurance. Currently, activities are being directed toward a Trails Conference 96 to be held in Tatamagouche in April 1996.

illfillan Lake is tucked quietly away, down a rough back road in Quinan, Yarmouth County, but the silence on the shoreline was briefly broken on August 15th. On that cloudy Tuesday afternoon, about 45 people marched down a muddy path to gather at the lake shore. Under darkening skies, representatives of Bowater Mersey Paper Company turned over 26 acres of land on Gillfillan Lake to the Tusket River Environmental Protection Association [TREPA]. The site was dedicated as the C.R.K. Allen Nature Reserve, in honour of Charles Allen who was present at the ceremony. Mr. Allen is known to many TREPA members as a lifelong naturalist who has promoted conservation in Nova Scotia for more than half this century. He is the retired principal of the Halifax School for the Blind, and author of The Naturalist's Notebook and other publications.

That August afternoon on the shore of Gillfillan Lake was a proud day for Mr. Allen, and all of TREPA. It was especially satisfying for those members who spent many months negotiating with Bowater for the successful donation of the land. For the past ten years the Gillfillan Lake property was leased from Bowater by the Nature Conservancy of Canada. During this time TREPA was interested in the rare and fragile flora along the lake shore, and worked with the Conservancy and Bowater to maintain the area as an ecological preserve. The now famous Plymouth Gentian can be found there as well as rare species of Panic Grass and the Dwarf Chain Fern. Other Coastal Plain Flora are found on this site as well.

J.H. Dunlop, President and General Manager of Bowater recently wrote, "At one time, these flowers were threatened by ATV use, but Bowater and TREPA worked hard to restore the area and educate cottagers and local residents about the importance of the site."

The donation of the land came after a long process of phone calls and letters back and forth between TREPA, the Nature Conservancy and Bowater. Many times during the negotiations TREPA found it very difficult to see the forest for the trees, but the hard work and dedication by all concerned paid off on August 15.

Now that the C.R.K. Allen Nature Reserve is established, work is underway to ensure the continued ecological integrity of the site. Quinan residents have already built a wooden fence from the low water mark to the treeline to protect the Gentian and Grass and to designate a preferred boat launch site. Signs are being planned with the name of the site and an explanation of the rare plants. There are no plans to improve the road leading to the lake shore. TREPA hopes this will discourage unnecessary traffic in the area and keep the fragile plants from harm. Unfortunately, a bumpy road is no obstacle for an all-terrain vehicle, but perhaps with a little education and understanding, the C.R.K. Allen Nature Reserve on the silent shores of Gillfillan Lake will remain silent a little longer.

sk the question, "What do Bald Eagles eat?" and you will find the usual, immediate answer is, "They're just scavengers." Upon a bit of reflection though, most people would agree that Bald Eagles (Haliaeetus leucocephalus) at least occasionally prey on fish. This is well documented in the scientific literature as well (eg. Haywood and Ohmart, 1986; Knight et al., 1990; and many others). Our own Robie Tufts never saw an eagle catch anything on its own, though he had heard of predation upon Gulls (Larus sp.; Tufts, 1986). In fact, birds make up a large portion of the food items of many Bald Eagles; their diet is known to include grebes (Podicipedidae), Loons (Gavia spp.), Coots (Fulica americana), ducks of almost every North American Genus, osprey (Pandion haliaetus) and many other birds including Great Blue Herons (Ardea herodias), (Haywood and Ohmart, 1986; Forbes, 1987; Douglas and Reimchen, 1988; Jorde and Lingle, 1988; Lingle and Krapu, 1988; Frenzel and Anthony, 1989; Norman et al., 1989; Knight et al., 1990; MacDonald and Seymour, 1994; Roy, 1995). In all accounts (save for Roy. 1995) was the predation/consumption of herons and other birds considered a normal phenomenon.

On the 17th of July, I watched an adult Bald Eagle chase, kill, pluck and eat (along with its mate and young of the year) a Great Blue Heron. I watched the entire event from my front deck, 300-500m distant, with a 20x scope. Except for the initial eight minutes (when I was too busy with my eye glued to my scope), all my observations were recorded on audio tape as the events unfolded. I did not see the initial attack, though both birds were low over Monks Head Harbour when I first saw them. Within the next few minutes, the eagle, through its manoeuvring prowess, forced the heron to land in the harbour, in water too deep for it to stand. The eagle then landed 30m or so away, on the shore. Interestingly, while the eagle was on shore, the heron did not attempt to take off from the water, in fact it was floating rather well, almost as if floating was routine for it. In addition, the heron did not appear at all agitated from the encounter; I would have expected to see it look around or try to swim to a shallower depth, but it just bobbed with the small waves while facing away from the eagle. A minute or so later, the eagle took flight, landed on the heron with one talon on the back and one on the neck, grabbed behind the head with its beak (to break the neck?) and submerged the heron's head for about 10 seconds. The eagle then swam to shore with the limp

Eagles swimming to shore with prey (usually fish), and
MacDonald and Seymour (1994) reported an eagle dragging an
Osprey to shore. Evidently, eagles have no problems with
doing a bit of swimming to get a meal.

Karen Diadick Casselman, Research Associate, N.S. Museum of Natural History

hown in the photograph is a fine specimen of the lichen Evernia prunastri on the limb of a dead tree in an unmanaged and mixed forest at Cheverie, Hants County. A few kilometres south, at Brooklyn, vigorous specimens of E. prunastri have colonized Acer spp. planted more than a century ago along the driveway leading to a farm.

After a windstorm, I can generally pick up a few specimens of E. prunastri from the trails behind my house at Cheverie. These specimens are now in the herbarium at the Nova Scotia Museum of Natural History. One was sent to Ottawa to confirm that E. prunastri does occur in the east.

For many years, the literature has reported that the

beautiful E. prunastri is rare to absent east of the central portion of the continent. E. prunastri is absent in studies from Maine (Hinds & Hinds), and from New Brunswick (Gowan & Brodo). Then what explains its occurrence in Hants County? Is E. prunastri an outlier - the last vestige of a once-abundant population in Nova Scotia? Is this a case of "discovering" a rarity because you go looking for it?

At several Nova Scotia institutions, herbarium material labelled as E. prunastri is actually a very similar species E. mesomorpha. However, one notable exception at the Nova Scotia Museum of Natural History is a 1880 specimen of E. prunastri collected in

Pictou County Alexander MacKay (Casselman & Hill). Added to this specimen are 1994 collections from Pictou County (Casselman & Hill), and at least a dozen specimens from various ( sites in Hants County.

According to Hale, E. prunastri is "a rarity in eastern North America".

> Wong and Brodo describe E. prunastri as "very rare, or more likely extirpated" in southern Ontario. Thus, what we/ have here in Hants County is a population worthy of protection, and certainly deserving of more study. In the meantime, we have photo-documentation to supplement herbarium material at NSMNH.



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Photo by: Ted Casselman, Cheverie

# INNOCENT PERCEPTIONS:

Do we see what we know Do we know what we see? David Lawley

Te both sat motionless, hidden in the tall reed grasses: two bird watchers identifying marsh birds. It was difficult to see clearly, as the tall grasses moved back and forth in the wind. We relied on several of our senses, at times only hearing the birds calling to each other. Then we heard a commotion... the sound of little webbed feet slapping the water, a blur of feathers, and for one short moment we saw the bird.

The problem was, we both saw a different bird, although it was the same one flying away. This is a common experience with nature lovers. We all want to know what we are seeing but often keep seeing what we already know. Bird watching, like other forms of innocently observing reality, has its handicaps. This was a case where knowledge limited our perception. We both thought we saw a bird we knew rather than accurately seeing the bird we were observing.

There are other times when knowledge can improve our perception. It is said that there are 76 octaves of radiant light, or energy. Plants, insects and animals other than man see or perceive some of these octaves. We humans, left to ourselves, see less than one octave. But, with our inventions we can monitor infrared, ultra violet, gamma rays and the other octaves that make up the complete spectrum of lights.



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Sight is not our only limitation; our sense of hearing and smelling are also limited. Dogs, for example, can hear and smell much more of reality than we can. But again, we know this, and have acquired knowledge about those things which we can't hear or smell. So, knowledge helps us, among other things, to see, hear and smell.

Now, seeing with knowledge depends on how accurate that knowledge is. Our perception of the world can be quite different if our ideas and information don't fit our reality. Once I was

# The FEDERATION OF NOVA SCOTIA NATURALISTS

The purpose of the Federation of Nova Scotia Naturalists is to further communication and co-operation among naturalists and natural history societies in Nova Scotia. We also work towards a co-ordinated effort on the provincial level to protect the natural state of our environment. Our activities include:

- Promoting the enjoyment & understanding of nature by our members and the general public by:
  - educating through publications, lectures, symposia, field trips, and other activities;
  - fostering the creation of nature centers and nature education programs, and defending the integrity of existing facilities and programs.
- Encouraging the establishment of protected natural areas, as represented in parks, nature reserves, wilderness areas, heritage rivers, and other such protected areas.
- Defending the integrity of existing sanctuaries by exercising constant vigilance against pollution and habitat destruction.
- Promoting and engaging in funding and research needed for protecting the integrity of all natural ecosystems.
- Encouraging and engaging in the protection and restoration of threatened and endangered species, with special attention to the preservation of essential habitats, by:
  - working for the inclusion of all major habitats in a system of protected areas;
  - encouraging and facilitating the reintroduction of extirpated flora and fauna to their former ranges in the province;
  - encouraging and facilitating the restoration and enhancement of essential habitats.

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Passing the day in the woods for the pure pleasure of it might help us to innocently see other points of view, altering our perception of the world. Wilderness areas, such as National Parks and nature reserves, offer us a chance to drift away from our habits of usual associations, allowing us to "stumble and fall" in the woods naturally. Remember, most of us learn from our mistakes.

Today, when my friend and I sit quietly in the tall reed grasses, we don't concentrate too much on what we are watching. Rather, we see the whole environment; the clear blue sky above and the placid water below, softly fringed with swaying grasses. We enjoy hearing the birds calling and the slap splashing of webbed feet. And when we finally see the bird, it's no longer just a blur.

Certainly, removing the blur helps us to see more clearly. Just as we become like those we associate with, why not go out and be with nature and see what it will do for your outlook on life.



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