

THE BRODIE CLUB



Established 1921

Website: <http://thebrodieclub.eeb.utoronto.ca/>

THE 1,072nd MEETING OF THE BRODIE CLUB

The 1,072nd meeting of the Brodie Club was held on Tuesday, 18 February, 2014 in Room 432 of the Ramsay Wright Laboratories of the University of Toronto.

Chair: Ken Abraham

Secretary: Sandra Eadie

The meeting was called to order at 7:35 pm and was attended by 36; 28 members and 9 guests.

Roll Call:

Present: Abraham, E. Addison, R. Addison, Bertin, Carley, Crins, Currie, Curry, Daniels, Dunham, Dunn, Eadie, A. Falls, B. Falls, D. Hussell, J. Hussell, Iron, A. Juhola, H. Juhola, Machin, McAndrews, Pittaway, Rapley, Riley, J. Rising, T. Rising, Slessor, Zoladeski

Guests: Terry Marescaux and Peggy Haist (guests of Bertin), Victoria Carley (Carley), Kathy Lindsay and Julia Riley (Riley), Marie Schommer (Dunham), Kevin Kerr (Rapley), Greg Budney (B. Falls), Sharon Hick (McAndrews)

Regrets: Beadle, Bousfield, Bryant, Martyn, Obbard, Seymour, Sutherland, Tomlinson

The roll call was enlivened by Zoladeski presenting each person with a newly-designed nametag, which he unveiled with a flourish of visuals and music. His tongue-in-cheek sample tags elicited laughter and cat-calls, but the actual products are attractive and historic in style, and his efforts were much appreciated.

Minutes: Minutes of the January meeting have been posted as revised by Ricky Dunn, and were unanimously approved sight unseen.

Committee Reports:

- Upcoming speakers (info submitted day after meeting):
 - 18 March: Kevin Seymour on the five great extinctions and whether one is underway now
 - April: Ed Bousfield on amphipods
 - May: Chris Zoladeski on the flora of eastern Russia and its similarities to North American flora.
- Dunn said she'd be glad to help anyone who is having trouble accessing the Brodie Club website (ericahdunn@gmail.com). Remember to use capital letters in the password (TBC1921)
- Rapley told us about a fundraiser at the Toronto Zoo for the Caño Palma Biological Station in Costa Rica. Fiesta Verde 2014 will take place Saturday May 10th from 6 pm to 11pm in the Toronto Zoo Atrium. Tickets are on sale at www.coterc.com/fiesta-verde-2014. It is sponsored by the Canadian Organization for Tropical Education and Rainforest Conservation.
- Rose Addison spoke about the record low numbers of Monarch Butterflies this past year. Research points to the use of Monsanto's Roundup weed killer as a main culprit. She

mentioned that people can sign a petition asking Monsanto to withdraw Roundup from the market at action.sumofus.org/a/monsanto-is-killing-the-monarchs/?sub=tw .

SPEAKER: Ed Addison introduced our speakers and fellow Brodie Club members, Glenda Slessor and Bob Curry, who gave an illustrated talk on Bhutan. Slessor spoke first followed by Curry.



Because their group tour had been cancelled, Curry and Slessor travelled privately to Bhutan, from April 6 to April 24, 2012. They had to arrange for their own entourage, which included a driver, a bird guide (from neighbouring Sikkim in India) and two local guides from Bhutan.



Bhutan lies in the Himalayas north of the Indian state of Assam and to the east of the Indian state of Sikkim and south of Tibet. In the eastern part of the country there are fewer inhabitants, fewer villages, and certainly rougher roads. The economy depends on the hydro-electric power it sells to India.

The trip started with entry from the south east, and followed the one main road that jogs north and south over various Himalayan mountain passes, till emerging at Timphu, the country's capital in the western part of the country. This may be the best birding road in Asia.

Slessor showed photos of the magnificent dzongs of Bhutan, the country's main tourist draw. Dzongs have been built astride the foothills of the Himalayas as fortresses set to guard from attack, and to serve as religious and community centres. These fabled white-washed buildings are still the important centers of community life and are the seat of government, and the religious seat of the region. Generally half of each belongs to the king or government, half to the priests.



Outside one can see the coarse if not actually crude construction of these buildings but in the interior there can be much ornamentation and wall painting depending on the wealth of the dzong. The murals on the walls of the courtyards tell the stories, fables and legends of the region. It is a respected career in Bhutan to be the artist who creates and maintains them.

The Punaka Dzong was their favourite (see photo). Rich and favoured, it was the site of the present King's coronation and of his wedding. Beautiful, and peaceful, it sits at the joining of two rivers (see photo).

Slessor also described other particular features of the landscape. Flag poles mark the burial sites of important people. Prayer wheels and banners send prayers into heaven. The fine words printed on the gauzy fabric blow in the winds, releasing the prayers to the world both literally and figuratively. The king's decree is that such flags can go up anywhere, and none may be taken down by others.

Unfortunately, the beautiful invigorating mountain passes have become choked with flags, strewn with what begins to look like trash.

Another obvious feature of the landscape is the stupa. Stupas are large religious monuments that contain religious relics honoring deceased kings monks and important people. You will find such stupas at the highest point of the many mountain passes, a common place of religious activity. And finally, everywhere chubby tiny clay miniature stupas are to be seen. They are a mixture of clay and bone or ashes of a deceased family member, shaped a bit like a Buddha or a stupa, and left at holy spots.

Everywhere people, including the ubiquitous monks, chew Betel leaves and spit them out in red blotches when finished. They have a light narcotic effect and are addictive. The recently married King whose picture is everywhere has forbidden spitting, but the rule is not followed too often.

Slessor and Curry usually camped. The tents were saggy tents with no floor and no room in often extremely primitive and uncomfortable conditions that included leeches and manure-infused soggy ground. The very rare inn or rest stop was a real relief.

Curry described the natural landscape, and particularly the birds, in more detail.

He pointed out that the eastern half of Bhutan is much less developed than the western half. There are few roads in the country and thus access to wildlife is limited. So the eastern roads are the sites for birds.

The Himalayas are a major locus and origin of biodiversity. Biogeographically, the Himalayan Mountain range straddles a transition zone between the Palearctic realm to the north and the Indo-Malayan realm to the south. Topography within the Himalayas is an isolating mechanism and of course, slope, aspect and altitude contribute to biological diversity both east-west and north-south.

Of the estimated 10,000 species of plants in the Himalayas about 3,160 are endemic, as are 71 genera. Over 70% of the total land area is forested. The Himalayas are home to one-fifth of the world's plant species. Lichen seen in the forests indicates the air is pollution free.

In Bhutan approximately 50 species of rhododendrons bloom from March on, but April is best. They now bloom about a week earlier than in 1997. Four species are endemic to Bhutan. All parts of the rhododendron, but especially the leaves, contain a toxin grayanotoxin. Honey from rhododendrons may be toxic but is rarely fatal. In Bhutan rhododendrons grow from 1,210 m to 4,800 m. Primulas are a specialty; of the approximately 5,009 species worldwide about half are in the Himalayas. Pitcher plants, locally called snake plant, are also found there.

Not many mammals were seen, but Curry and Slessor did observe Gee's Golden Langur (*Trachypithecus geei*), which lives in a limited range in southern Bhutan and in Assam, India. Curry said, "Surely this is one of the most beautiful primates in the world." It was "discovered" in 1953. The only snake seen was a "Gliding Snake" that looked like a Rat Snake (*Elaphe*).

Although their guide was not very friendly or open, and was most interested in photography on his own behalf, he was competent and well-prepared with tapes that brought in the birds. Many of the very good bird photos shown in the talk were taken by this man.

The Himalaya region has a spectacular array of more than 600 beautiful birds. While Bhutan has no endemic bird species, there are several endemic Himalayan species, some of which were seen on this trip. Curry showed some of the special birds from the trip and gave an overview of the kinds of birds to be seen.

For example, the Ibisbill is one the 50 most sought after birds in the world. It is shorebird that was once thought to be an avocet but is now in its own monotypic family.

Other species seen: Collared Owlet, Ward's Trogon (a Himalayan endemic), piculets, the Rufous-necked Hornbill (*Aceros nipalensis*, a Himalayan endemic), Yellow-footed Honeyguide (a Himalayan endemic), the Long-tailed Broadbill, and the Golden-billed Blue Magpie -- surely one of the world's most spectacular Corvids.

Bird groups represented included bulbuls and greenbuls, old world warblers including the hard to find hidden tesias, babblers, scimitar babblers, wren-babblers, laughingthrushes, cutias, sibia, mesias, minias, yuhinas, barwings and parids including the very very large Sultan Tit. To add to the list there were fulvettas, parrotbills, flycatchers, forketails, a grosbeak and a nuthatch.



The Himalaya Cutia (photo at left)—a Laughingthrush—is regarded as one of the top birds in Asia. Three of these birds came in to playback and perched absolutely still and silent for five minutes. Another fine bird is the Scarlet Finch, whose colour has to be experienced to be believed.

Not least among the spectacular birds are the pheasants (phaesaniidae) which includes Red Junglefowl (chicken). This group is strictly Old World. The birding party cruised the road in late afternoon until it found a Satyr Tragopan, Curry's most wanted bird in Bhutan (photo at right).



By the end of the trip they had seen 291 species, 116 of which were new to Curry and Slessor.

Questions following the presentation:

To a question about the Gross National Happiness Index that Bhutan is noted for, Slessor said that the population was not particularly friendly and she didn't notice that it was happier than in other places she has visited.

The forest is probably still as intact as it is because infrastructure for transportation and export is pretty recent, and much of countryside is still very remote, especially in eastern area. The forest will probably disappear eventually, as it has everywhere else.

Curry emphasized that having bird tapes was critical to seeing as many birds as they did. He also said the birds are best in April, which is of course why the trip was set for then.

Electricity is free for the people. They have only had TV for about 10 years and it broadcasts in 3 or 4 languages. There are about 40 languages in the country.

Bill Crins thanked the speakers.

OBSERVATIONS

Ed Addison talked about the beauty of the night sky near Thunder Bay, which he had only left that morning.

Oliver Bertin brought to our attention a newspaper article that says the ice covering on the Great Lakes reached 88% this winter. Superior, Huron and Erie were covered in ice. And about 80 per cent of Lake Michigan and 41% of Lake Ontario.

Chris Zoladeski gave a short presentation on a new theory of extinction on earth. Many scientists accept that a large percentage of extinctions have been caused by meteors and comets hitting the earth. Now a new theory says that astronomical events increase the odds of this happening.

Recent research has pointed to the idea that our galaxy the Milky Way has four major spokes dense with stars and other matter. The area between the spokes is much less dense. The sun moves faster than the main mass of the galaxy and so enters, exits and re-enters the dense spokes over time. The new theory is that when the solar system is in a spoke, the odds are much higher for comets and other objects to be knocked out of the Oort Cloud into the planetary area and onto a potential collision with the earth.

NEXT MEETING

The next meeting will be on 18 March. Kevin Seymour's topic is "The Five great extinctions: are we entering a sixth?"

The meeting was adjourned at 9:30 pm.

NEWSLETTER EXTRAS

In the archival records on our website, you can look at the newsletter from 25 years ago (January, 1989), when Gordon Edmunds spoke on [30 years' study of fossil giant armadillos](#).



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