

THE BRODIE CLUB



Established 1921

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

THE 1,102nd MEETING OF THE BRODIE CLUB

The 1,102nd meeting of the Brodie Club was held on Tuesday, 23 May, 2017 in Room 432 of the Ramsay Wright Laboratories of the University of Toronto.

Chair: Kevin Seymour

Secretary: Sandra Eadie

The meeting was called to order at 7:36 pm and was attended by 29; 24 members and 5 guests.

Roll Call:

Present: E. Addison, R. Addison, Bell, Bertin, Currie, Daniels, DeMarco, Dengler, Dunn, Eadie, B. Falls, A. Falls, Hussell, King, Kortright, Machin, Martyn, Peter, Reading, Riley, J. Rising, T. Rising, Seymour, Zoladeski

Guests: Jody Allair (guest of Hussell), Ron Dengler (Dengler), Kathryn Falls (B. and A. Falls), Roz Holeton (J. and T. Rising), Katie Thomas (Currie)

Regrets: Abraham, Beadle, Bryant, Carley, Crins, Curry, Iron, LaForest, Lindsay, McAndrews, Obbard, Peck, Pittaway, Slessor, Sutherland

Minutes:

Committee Reports:

Field trip (from email sent to members):

Sunday 18 June 2017. Sibbald Point Provincial Park on Lake Simcoe near Sutton. Entrance fee \$11.50 per car. Say you're a senior (if you are). Ask for a park brochure with map. Meet in parking lot of Park Store at 9:30 a.m.

Program:

- Morning - 2 options: (1) Walk 2 km on the Maidenhair Fern Trail, focusing on botany and bird song ID. (2) Second group can look for birds, herps, fish, dragonflies, plants, etc. along shoreline of Lake Simcoe, and check for butterflies in meadows around Outdoor Amphitheatre.

- Lunch in picnic shelter or at picnic tables in day use area. Indoor washrooms and park store are nearby.

- Afternoon (1 p.m.) - A presentation by MNR Fisheries Biologist Erin Brown on the history and

importance of the fishery in Lake Simcoe, with an emphasis on current research and **management** priorities. Other activities TBA.

Optional: If the water is warm, you can go for a swim. There are change rooms and a fine sandy beach.

DRIVING DIRECTIONS: Park is 75 km (1 hr.) from 401/404 junction. Follow 404 to end at Woodbine Ave. Turn left (north) go to Raven shoe Rd (#32) at next intersection. Turn right (east) on Ravenshoe and follow to Highway 48 at second traffic light. Turn left (north) and follow #48 to Park Rd at second traffic light. Turn left (north) on Park Rd and follow to just past Black River Rd (#18 at first intersection). Park entrance is on right marked by an Ontario Parks sign. I recommend that everyone locate park on Google Maps and print out directions.

QUESTIONS: Email or phone Ron if you have questions. My email and phone are in the membership list and below.

Email: Ron Pittaway; e-mail: jeaniron@sympatico.ca
Phone: 416-445-9297

A show of hands indicated that about 20 members would be coming.

Treasurer

The current proposal for dues is that members who attend regularly would pay \$20 a year. Corresponding members would pay \$10 a year. The definition of corresponding is a bit fuzzy but basically if a person only manages to get to less than 2 meetings a year over a period of 2 years then he or she is a corresponding member. No communications will be sent if dues are not paid.

Bertin asked about limitations on membership size. Bruce Falls pointed out that elder members are not counted when calculating any limits.

Program Committee (Ed Addison):

Addison invited members to submit offers to present at Members' Night, September 19, 2017. Please send suggestions to Bruce Falls and Ed Addison. Talks are limited to 10 minutes.

Addison said that the club has a huge variety of possibilities for talks next season and the committee will be meeting to decide which ideas to pursue.

Addison mentioned that his operation went extremely well and everything turned out better than was ever imagined.

Announcements:

Malcolm Telford – retired professor of zoology at the University of Toronto – has written a book, “Flying Sand Dollars, Left-handed Crabs, Giant Earwigs, and Other Curiosities”. T. Rising had some available for sale. More information at <http://flyingsanddollarslefthandedcrabs.ca/>

SPEAKER:

Eadie introduced the speaker, member Justin Peter. He was the group leader on her recent trip to Galapagos and he is a very active participant in Ontario's nature community. His topic was “Natural History of Rajasthan and Gujarat”.

India's population is now over 1.3 billion and it may have already overtaken China's. Even so there are still uncrowded spaces to be found there. Eons ago the Indian subcontinent was attached to Madagascar, but it broke off and drifted and rammed into Asia, pushing up the Himalayas.

Although India has an exotic image, it won't be completely foreign to us as visitors since English is spoken widely and is an official language.

With habitats spanning the gamut of sand dunes, salt flats, scrub woodland, bona fide forest, village ponds, grassy plains and rocky escarpments, Rajasthan and Gujarat present an opportunity to see some the wildlife for which India is widely celebrated such as its tigers as well as the less familiar.

Typically a first stop in a visit to the northern part of India is Delhi, which is crowded and noisy. India can be strikingly modern and glaringly medieval at the same time. Take the carts used for transportation with their ancient colours and designs, running on rubber tires.

Rajasthan is very dry, right on the edge of India. There is much less precipitation than elsewhere in the core of India. But when the monsoons come, July through September, it can be a time of abundance. Then the country dries out October to June.

The Thar Desert is mostly in Rajasthan, and extends into Pakistan and Gujarat. **Desert National Park** is situated in it. The park has tall grasses, peculiar shrubs, and very bare rocky areas. Twenty percent of the area is covered by sand dunes. Desert melons grow there. There is tumbleweed and there are wind farms. A common tree/shrub is the *Capparis decidua*, which is practically leafless. It has berries that local people and wildlife eat. At the base the very striking *Cistanche tubulosa* (Desert Hyacinth or Fox Radish), a holoparasite, erupts from the ground beneath its shrub host.



Desert Hyacinth emerging below *Capparis decidua*

The Thar Desert is a fantastic country for birds such as Green Bee-eater, Southern Grey Shrike, raptors, and the critically endangered Great Indian bustard. Third in weight among flying birds, only an estimated 125 are left in the world. Genetics show that they came close to extinction 20 – 40 000 years ago so perhaps there is hope for another recovery. Justin's group saw two. Unfortunately, Indian national parks are not necessarily well protected. Bustards need undisturbed grassland. But cash crop farming, such as cotton, that irrigates with monsoon water has allowed encroachment into the desert. In one of the reserves free-roaming domestic or wild ungulates can trample eggs. It is a sad situation.

Another specialty of the area is the Chinkara or Indian Gazelle, a small animal of shoulder height.

The wettest region in in this area might be the **Rann of Kutch**, with an area of 5,000 square km.

It consists of low-altitude seasonally flooded salt flats in the desert of Gujarat north of the Gulf of Kutch. Every year when the monsoon rains come, sea water is forced far inland resulting in a fantastic habitat for birds, such as pelicans, River Terns, Black-tailed Godwits, Common Crane, and two flamingo species. The Greater Flamingo is the state bird of Gujarat. Once the area begins to dry out, the flats are host to Short-eared Owls and lots of little brown birds (including various larks).



A flock of Lesser Flamingos at the Little Rann of Kutch, Gujarat

The Indian Wild Ass, the local subspecies of the Asiatic Wild Ass, has its stronghold here. There are about 4,500 in Gujarat and the population is recovering. They can tolerate heat and the sun and can travel 65 miles in 3 hours. They are good at escaping predators. They eat grass. Threats include disturbances such as salt farming in the Rann.

The next area described was **Blackbuck National Park**, a 34-square km area of grassland. The grass may reach about 1 metre tall and turns reddish tones during the dry season. Blackbuck, an endemic antelope of the Indian sub-continent, is found here. Once there were possibly 4 million across India. Since 1900, they have gone from 100,000 to only 2,000 in the local region.



Adult male Blackbuck

Their horns turn 4 times and the males' coat becomes blacker with more testosterone. These animals pronk, that is they jump and land with all four legs off the ground. Formerly the now-extirpated Cheetah was the fastest land animal in India, but now the Blackbuck holds that title. Captive Cheetahs were in fact once used for hunting the Blackbuck.

In this habitat, an introduced mesquite (*Prosopis juliflora*) from Mexico is taking over and the Blackbuck is helping to disperse the seeds. Ironically the mesquite will eventually crowd out its habitat.

This area is great for harriers, of which there are three species, including the Pallid Harrier, which benefits from the large rodent population of the area.

A great diversity of cats is found in India. There are lots of small carnivores and a diversity of larger carnivores including the Indian Wolf, a subspecies of the Grey (Timber) Wolf. It looks skinny, with very little hair on the tail and a short fur. Not only does it hunt Blackbuck but it also hunts goats and sheep and sometimes children.

Next stop is **Sasan Gir National Park**, the sole home of the Asiatic Lion. The area looks like scrub with a bit of a savannah feel. Birds include the Plum-headed Parakeet, the Blue Peafowl, and Yellow-footed Green Pigeon. Lions were hunted to the brink of extinction to about a dozen animals. But at the last moment starting in the early 1900s rescue efforts have resulted in a population of over 500 animals today. They are different than African Lions with a fatty dewlap on their belly and they don't have such a full mane. The bigger males were presumably selected by hunters. This may explain why the lions are smaller in size than in Africa. At one time Asiatic Lions had a large range in India. This is demonstrated by a classic 17th century painting depicting the Mogul ruler Shan Jahan (who built the Taj Mahal) hunting lions at Burhanpur, a town at the edge of his empire and towards the middle of the country.



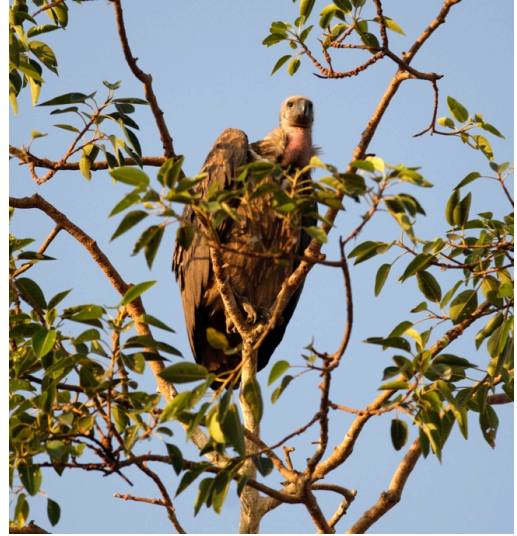
Two Asiatic Lionesses at Sasan Gir

After independence, the local people were allowed in the park to use it for cattle grazing. But the lions might actually have benefitted from this by finding easy prey in the form of domestic cattle. The lions are surprisingly popular nowadays with the locals because they can assist in scaring off crop-raiding ungulates; the locals can actually call the lions in. The lions are doing so well that they are beginning to spread beyond the park borders. People don't generally bother them.

The next stop is **Ranthambore National Park** in Rajasthan, one of the most renowned national parks in Northern India. It is a Project Tiger Reserve. Tigers select for large prey such as the Sambar (a large deer related to our Elk). Tigers are very cryptic and need a dense cover to hide. They are burst hunters. They are also territorial and keep out of each other's way. The tiger reserve is getting to saturation levels. In all of India there are 2,200 tigers

Finally, Justin took us to the town of **Khichan**, a place where a Jain resident began a tradition of feeding Demoiselle Cranes. Jains have a strong sense of kinship with nature and are strict vegetarians. For some 40 years the thousands of Demoiselle Cranes that overwinter in the dunes around the town come to be fed twice daily. The cranes come right into the town's centre for their gift of grain. A fenced plot of perhaps an acre has been set up to protect them and their food from dogs and cattle. We saw a video of this.

Justin also spoke about India's White-backed Vulture. This vulture has declined by 99% since the mid-1990s (other species have also declined). The cause is diclofenac, a non-steroidal anti-inflammatory drug used to treat infirm cattle and that is fatally toxic to vultures. A similar drug is used by humans. Unfortunately, vultures eat dead cattle in places such as the Delhi carcass dump. Because sick cattle may die before they have metabolized the drug, it is still in their systems when the vultures eat them. There has been a campaign to ban the drug. Vultures can travel 250 km/day so it is easy for them to find tainted carcasses. Less than 1% of cattle carcasses may need to contain a lethal concentration to cause massive vulture population decline.



A year-old Indian White-backed Vulture

But as a sign of hope, Justin visited a new vulture nest site with year-old young along with two adults, which were about to enter their second nesting cycle here. This could be the first nest site in the area in perhaps 20 years.

Questions following the presentation:

Dunn – asked about the negative effects of the monsoon —flooding of land and deaths from floods. Justin said that the people realized that net effect of the monsoon was positive and so monsoons are welcomed with some trepidation.

E. Addison mentioned that diclofenac is now on the market in Spain.

Currie asked about the Grey Hypocolius; Justin responded that this bird (monotypic in that it is the only member of its family) can be found in Gujarat west of the Rann of Kutch.

Bertin thanked the speaker.

OBSERVATIONS

Machin reported that a flock of 15 to 20 Bobolinks appeared in the garden on her farm on the Madawaska River. This is unusual for her place.

Currie saw a very early female Monarch butterfly at the end of May.

E. Addison saw a Red-breasted Nuthatch take over a nest cavity rejected by a Downy Woodpecker.

On a walk at Long Point, Daniels found a couple of Coyote (or brush wolf) burrows in the bank.

Bertin saw 5 Midland Painted Turtles on a log in Wychwood Park's pond. Hugh Currie mentioned that two Eastern Screech-Owls have been seen there near the tennis courts.

Daniels found a Groundhog hole in his backyard for the first time in a while. He is wondering if they are more common this year.

The meeting was adjourned at 9:10 p.m.

NEXT MEETING

The next meeting, Members' Night, will be on Tuesday, September 19. See Program Committee announcements on page 2 above for details.

CORRESPONDENCE

The Membership Committee received applications for membership from Anne Bell and Jerry DeMarco. Their applications have been welcomed and approved by the committee, and they have forwarded biographies for inclusion in these minutes.

NEW MEMBERS

Anne Bell

Anne Bell's formative nature experiences were summers spent collecting shells, sorting stones, catching grasshoppers, gathering berries and fishing on the shores of Lake Huron near Goderich, Ontario and in the Qu'Appelle Valley of Saskatchewan. She worked for five years as a high school French teacher in Parry Sound where she saw her first Hooded Merganser, Pileated Woodpecker and Pine Grosbeak. The rocky shorelines and windswept pines of Georgian Bay soon inspired her return to school to pursue a career in biological conservation. She completed a Master's and a Ph.D. in Environmental Studies at York University and had the privilege of studying under professors John Livingston and Neil Evernden, both major influences on her understanding of and approach to nature advocacy. During this period, she was also busy getting married to Jerry and having children: Kestrel and Castilleja. In 2007 she became the Director of Conservation and Education at Ontario Nature, where she oversees programs and leads policy reform efforts. Anne enjoys spending time outdoors with her family, whether birding, gardening, hiking, skating or swimming. She has been fortunate to travel to many biodiversity hotspots around the world and has developed an especially strong affinity for sloths and chameleons – perhaps because they ably live life in the slow lane and stay in one place long enough for her to have a really good look.



Jerry DeMarco

Jerry DeMarco grew up in Essex County where frequent visits to Ojibway Park and Point Pelee helped nurture his interest in natural history. A wayward Lewis's Woodpecker in his neighbourhood was an early entry on his life list of birds. Jerry was four at the time, and apparently this sighting sealed his fate. Ever since, birds have been a constant source of interest and motivation, whether in the backyard, from his office window or in some more exotic locale. For many years, he and his daughter Kestrel have successfully teamed up in the Botham Cup 24-hour bicycle-powered spring birding race on Pelee Island. Despite the avian priority, he enjoys observing all manner of living things - except of course vegetation that obscures his views of birds. His career has focused on environmental law, both as a lawyer and adjudicator. His academic interests are varied, including science, environmental studies, law, and management. His M.Sc. at the University of Toronto Department of Zoology was supervised by long-time Brodie Club member, Dr. Jim Rising. He and his wife Anne are the proud parents of two daughters, Kestrel and Castilleja, each of whom was named following a careful review of the indices of numerous field guides.

