

# THE BRODIE CLUB



*Established 1921*

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

## **THE 1,111th MEETING OF THE BRODIE CLUB**

The 1,111th meeting of the Brodie Club was held on Tuesday, 15 May, 2018 in Room 432 of the Ramsay Wright Laboratories of the University of Toronto.

Chair: Bill Crins  
Secretary: Ed Addison

The meeting was called to order at 19:34 pm and was attended by 27; 22 members and 5 guests.

### **Roll Call:**

Present: E. Addison, R. Addison, Beadle, Bell, Bryant, Coady, Crins, Currie, Curry, Daniels, DeMarco, Dengler, Eadie, Hussell, Kortright, Martyn, Peter, Rapley, Reading, Slessor, Thomas, Tomlinson.

Guests: Dominic Stones (guest of Bryant), Elain Wyatt (Eadie), Rae Hutchinson and Dierdre Tomlinson (Tomlinson), Dr. John Bacher (Rapley)

Regrets: Abraham, Bertin, Dunlop, Dunn, A. Falls, B. Falls, Iron, Johnson, Lumsden, Martin, Obbard, Pittaway, Rising, Seymour, Sutherland

### **Minutes:**

Minutes of the previous meeting were passed (Peter/Coady).

### **Committee Reports:**

#### Field Trip Committee Report by Curry

The field trip will be to the Carden Alvar. Attending members voted for the trip to take place on Sunday, June 10 (16 votes) rather than on the following Saturday (3 votes). Arrival time will 0930 hrs at the Kirkfield Lift Locks picnic ground. Bob Bowles, a botanist, has agreed to be in attendance as a guide. The group will probably visit Wylie Road in the morning, have lunch at the lift locks picnic area and spend the afternoon at the Cameron Ranch.

#### Treasurer's Report by Bryant

The Club has paid for one person to attend the Ontario Nature Youth Camp. At the prior time of voting to raise Club member fees, members had voted to sponsor an attendee.



**SPEAKER:**

Anne Bell received a brief introduction from J. DeMarco. Anne received her Ph.D. from York University, is on staff at Ontario Nature and has two daughters. Many of the exceptional photos in Anne's talk were taken by her daughter Kestrel.

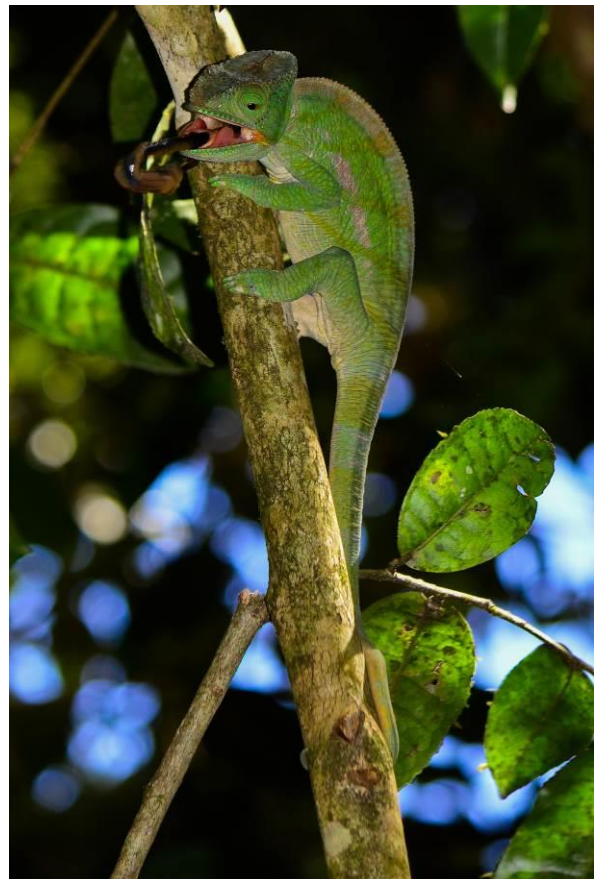
**TITLE: A CHEERFUL PESSIMIST VISITS THE EIGHTH CONTINENT**

Anne's family had a three week trip to Madagascar. Three or four Brodie members in attendance had previously visited the island. There is a wide diversity of biota still available to be seen in Madagascar (e.g. approximately 1000 species of orchids). The island is 400 km off the coast of Africa having been isolated from other land masses for more than 80 million years. It is the 4<sup>th</sup> largest island in the world with a high degree of endemism amongst its biota. Endemics include lemurs (100%), frogs (90%), reptiles (91%), plants (80%), birds (46%) and chameleons (100%). Chameleons of Madagascar comprise about 50% of all species of chameleons in the world.

Anne began with some of the discouraging facts about Madagascar. Much of nature has been lost, reminiscent of a quote from John Livingstone that 'Wildlife conservation is a catastrophic heart-breaking disaster'. Many landscapes are degraded, less than 2000 years ago there were millions of giant tortoises but now there are none and 17 species of lemurs are extinct. Although the human footprint of residents of Madagascar is small compared to that of individuals in our society (1/8<sup>th</sup>), problems remain because, for example, 80% of the people are dependent on charcoal as a source of fuel. This leads to deforestation including of parts of protected areas and an overall 90% loss of natural cover. Wetland loss is more severe than deforestation because wetlands are either turned into rice paddies or drained with the clay substrate that is mined for making bricks. Much of the country is devoid of birds.

Turning to more positive observations, Anne noted that greater than 8% of the GDP and greater than 6% of employment is realized from ecotourism. Tourist operators are paying local people to protect local natural lands such as wetlands. There is a captive program run by the Durrell Wildlife Conservation Trust for increasing ploughshare tortoise numbers.

The presentation was supported by exceptional photos presented in creative ways. Chameleons were of special interest. Images displayed a wide diversity of species, documented their unusual clawed hands and feet that allow them ready movement in shrubs and trees, demonstrated the ability of chameleon eyes to look forward and backward, displayed the ability of chameleons to change colours, and documented the length of their tongues (1.5 times the length of the body without the tail) and rapidity of tongue movement in capturing prey (0.07 seconds).





Amongst trees, baobabs were of special interest. Six of 9 of the known world species of baobabs are endemic to Madagascar. Threats to baobabs are low reproduction, poor dispersal and climate change. Tortoises used to play a significant role in dispersing baobab seeds.

*Euphorbia stenoclada* in the Spiny Forest served as an illustration of convergent evolution, in this case with cacti.

The Hazotsifantatra tree, called ‘the unknown species’ in the Andasibe area, is a spiritually highly significant tree

that most people are prohibited from touching. Brightly coloured textiles are twined around the trunk of the tree. The sap of this tree is coloured as red as blood.

Two species of tenrecs, including *Echinops telfairi*, were seen. Tenrecs are related to elephants and sea cows (Afrotheria clade).

Madagascar is famous for lemur diversity. Lemurs are highly variable in size, some species small to fit into a tea cup and others weighing up to 9 kg.

Photographs were shown of the dry west of the country, with prominent mountains of granite and others of limestone.

Where crocodiles are present, signs warn against swimming, getting in the water and fishing. People disappear every year in areas with crocodiles.



Small, sail-powered wooden boats (pirogues) are used to transport people out to reefs in the ocean for snorkeling. There were humpback whales coming up from Antarctica for calving.



The trip was in August, a relatively dry part of the year. However, there were still some land leeches. The dry season meant there were fewer insects than at some other times. Invertebrates observed included butterflies, dragonflies, crickets, scorpions, spiders, caterpillars and weevils. Frogs are the only amphibians in Madagascar and were abundant. Geckos were “everywhere” including in cabins where the family stayed. Despite birds being very quiet at this time of year the travelers saw many species including all of the couas and many other endemics. The only seabirds seen were during a visit to a nesting island for Red-tailed Tropicbirds (*Phaethon rubricauda*). The highly sought-after helmet vanga (*Euryceros prevostii*) is a bird that can best be seen in the northeast of the country, but travel in that area comes with added time and costs. Thus, the guide took the family on two arduous hikes in another area where seeing this bird was less likely, but where the search proved successful.

### **Questions following the presentation:**

Curry: *Has there been any attempt to clone the single distinctive Hazotsifantatra tree?* Don't know. Most people are not allowed to even touch it.

J. Bakker: *What was the charming lemur species shown at the end of the talk?* It was a ring-tailed lemur.

Eadie: *Were you on a tour?* We created our own itinerary and hired a guide and drivers for the family of four plus two friends. *How long were you there?* Twenty days.

Bakker: *Do the local people receive any foreign aid to assist in protecting areas?* Some, at least. For example, UNDP assisted in the protection of the Anja Community Forest.

R. Addison: *With the small ecological footprint of locals, is there an educational system?* Yes, there is a compulsory school system, which includes the teaching of French.

Daniel: *Is there industry present such as mining?* Yes, there is lots of mining, presently focusing a lot on sapphires. Mining has resulted in the siltation of rivers.

Currie: *Did the guides cook for you?* No, we rarely ate local food. Our guides normally brought us to restaurants that served western food.

E. Addison thanked Anne and daughter Kestrel, who had taken such exceptional photos.

### **OBSERVATIONS**

Tomlinson: Azure butterflies are extremely common this spring.

Bryant: There is only one location in Canada recorded to have Mountain Cottage Cinquefoil *Potentilla tabernaemontana*. The record was based on observations from May10 - May14 in 1953-1954 and that site was in a Toronto cemetery. Bryant located the site in Section Q of Mount Pleasant Cemetery where the bright yellow flower can be observed from passing subways! Apparently the only other known record of this European species in North America is a site in Connecticut.

Currie: There is a new book out entitled "Birds New to Science" by author David Brewer. It reviews 288 bird species described since 1960. Accompanying photos are well done.

Rapley: Went to St. Augustine, South Carolina. At an alligator farm there were lots of egrets, herons, wood storks all easy to see plus 22 species of alligators.

Coady: We are on the cusp of recording a new species of breeding bird in the local area. A pair of Fish Crows was observed in Mississauga copulating. Roy Smith has found a pair of Piping Plover on Toronto Island.

Curry: At Strathroy Conservation Area on May 13, three drooping trilliums (*Trillium flexipes*) were observed. More were present there a few years ago.

Bakker: Asks if a hawthorn meadow habitat in the Niagara area is endangered? He saw Black-billed Cuckoo there and lots of Wood Thrush, which appear to have gone from the Toronto area.

E. Addison: In a three hour trip from Peterborough to Ottawa along Highway 7 a few weeks back, five road-killed beaver were seen. This is more than he had seen cumulatively in the rest of his life. He speculated that one possible reason for this temporal cluster may have been younger beaver from prior seasons being driven away from the parental lodge, as the next generation is due to arrive within a few weeks. On a subsequent trip over the same route within two weeks following, no dead beaver were observed.

The meeting was adjourned at 2100 hrs.

### **NEXT MEETING**

The next meeting will be on Tuesday, September 18, 2018 and will be a series of short presentations by members. Please contact program committee members (Ed Addison, Marc Johnson Bryant, Bruce Falls or Don Sutherland) if you are offering to speak on members' night.

The meeting was adjourned at 21:02 pm.