

**918th Meeting of the Brodie Club**

**Business:**

Chair: Paul Aird  
Membership Secretary: Bill Carrick  
Secretary: Jim Rising

Guests: Mary Boswell, J. N. Haas, Trudy Rising

Minutes approved as circulated

**Announcements:**

Jock McAndrews: A revision of Faull, J. H. The Natural History of the Toronto Region, which was originally published in 1913 is being prepared. Betty Roots is the General Editor. To be published by the Royal Canadian Institute.

John Riley: Reported that property tax changes were introduced to Ontario, to take effect 1 Jan. 1998, that will assure that woodlands and conservation lands will no longer be assessed as residential lands, and the tax rate on conservation lands will be 0% of the residential rates. This should encourage persons to set aside such lands.

Bill Rapley: mentioned a forthcoming Metro Toronto Zoo Tour to Belize.

Ann Falls: circulated a petition in support of the CBC, especially programs such as Morningside, and provided us with an e-mail address for Perrin Beatty.

**Guest Presentation:**

Jock McAndrews introduced our guest speaker, Dr. David Wedin, of the Department of Botany, University of Toronto, who spoke to us about the Prairie Ecosystems of Ontario and the Great Plains. The talk started at 8:20 p.m.

Many of the rare species of plants in Ontario occur in the Carolinian Zone, and many of these are species with affinities to the western grasslands, esp. the Tallgrass Prairie (e.g. the Konza Prairie in eastern Kansas). Many of the species, for example, that are found in the High Park savannah remnants, such as big bluestem and lupines, are species characteristic of the Tallgrass Prairies of the Great Plains. Ontario is right at the edge of the prairie-savannah community, which is a tension zone between grassland, savannah and woodland (esp. oak woodland). The distributions of these habitats is probably in dynamic equilibrium, with the actions of large grazing ungulates (e.g. bison, elk) and fire being important in the maintenance of grassland habitats. Fire is probably especially critical for the maintenance of Tallgrass Prairie.

The Tallgrass Prairies historically extended from southern Ontario and western New York (where in scattered patches) west to about the 100th Meridian. Much of the area that once was Tallgrass is now planted in corn (a tallgrass species in its own right), so that Tallgrass Prairie is a threatened habitat. For example, there were 35 million acres of Tallgrass in pre-settlement Iowa; now there are ca. 2000. Most of the Tallgrass Prairie still in existence has been purchased by the U. S. Nature Conservancy. The largest area, some 40,000 acres in the Osage Hills, is in northeastern Oklahoma.

The grasslands in southern Texas are also a tension zone, with mesquite and opuntia taking over when the grasslands are overgrazed, which has been done extensively in the U. S. southwest and northern Mexico. In parts of the arid southwest desert can take over.

In Costa Rica, introduced grasses are endangering the natural dry Tropical Seasonal Forests in the northwestern part of that country.

In New Mexico and the western Plains, there is Shortgrass Prairie, with Blue Grama grass being a characteristic and common species. In many places there is a tension zone between Pinyon-Juniper and Shortgrass Prairie.

In northwestern Nebraska, in the Sand Hills, there are large areas in private hands with good grasslands, growing on sandy aeolian soils, deposited during the last ice advance. Along the Niobrara River, in the river valley, there are species characteristic of the eastern deciduous forests, such as sugar maple, beech, and ironwood, growing next to prairies interspersed with ponderosa pine.

In Saskatchewan, some nice Shortgrass Prairie is preserved in the soon-to-be-created <sup>conservated</sup> Grasslands National Park.

Many of the prairie remnants in Iowa are distributed along railroads, as parts of the right-of-way, and these are small patches as are the remnants in Ontario.

There has been a change in the average April temperatures from 1950-1990 (but no such changes in July and August temperatures). Temperatures have increased in the northern grasslands more than in other places.

Another threat to prairies is nitrogen pollution, which has increased, especially in Ontario.

In answer to questions, Dr. Wedin noted that most of the nitrogen in the prairies is not cycling (hence the dark soils). Thus, in the past, prairie soils were nitrogen limited.

Legumes are not particularly common in the prairies, as one might expect in nitrogen poor soils, but they are more common in the western prairies than in the eastern ones. They are probably favoured by herbivores, who also need nitrogen.

Bruce Falls thanked the speaker.

#### Members Notes & Observations:

Bruce Falls: and Ron Tasker were in the mountains of northeastern India during the past meeting. They found some forest fragments and saw some interesting wildlife, including many birds and Indian elephants and rhinos.

John Speakman: returned from Venezuela, where he saw, among other things, an Andean Condor. Condors have recently been reintroduced in that area.

Bill Rapley: noted that Snow Buntings from last winter seem to have returned.

A Yellow-billed Loon has been seen on Lake Erie, and also a Gyrfalcon was reported.

Hugh Curry: reported an Ivory Gull and Pickering <sup>gull</sup> east to Presque'ile.

Bill Carrick: notes that a white Gyrfalcon was seen near Millgrove, Ontario.

MEETING ADJOURNED at 10:30 PM

#### NEXT MEETING:

The 919th meeting of the Brodie Club will be held on Feb. 18th - Room 430, Ramsay Wright Bldg., U. of T. St. George & Harbord.

Room open - 7:30 - Meeting starts 8:00 PM

SPEAKER: Dr. Noe Zamel

SUBJECT: (Travelogue) Search for the Gene of Asthma  
on the Island of Tristan da Cunha