

**New England Botanical Club -- Minutes of the 981<sup>st</sup> Meeting**  
**4 October 2002     Donald J. Padgett, Recording Secretary *pro tempore***

The 754<sup>th</sup> meeting of the New England Botanical Club, being the 981<sup>st</sup> since its original organization, met on Friday, October 4, 2002, at the Fairchild Building, 7 Divinity Avenue, Harvard University, with 42 members and guests present. President Paul Somers introduced Past-President C. Barre Hellquist who spoke to the Club on “Dodging crocodiles on tropical Australia for aquatic plants”. Barre spoke at length of his tenth trip to Australia since the 1981 Botanical Congress (Sydney), which served as a follow-up trip to his 1997 sabbatical research. Like that past sabbatical endeavor, this two-month expedition included teaming up with Surrey Jacobs of the Royal Botanic Garden-Sydney. This fieldwork focused primarily on the aquatic genus *Nymphaea*, the water-lilies.

Barre began by informing the Club of his immediate research findings—that “toilets don’t flush backwards” in Australia. Barre’s quests for tropical aquatic plants took him from the northernmost point on the mainland, the tip of the Cape York Peninsula in Queensland, through the rugged Kimberley at the northern end of Western Australia. In all, this venture carried him by train, plane, automobile, and helicopter to some of the most remote places for fieldwork.

Australia is home to numerous plants adapted to its permanent or temporary freshwater bodies, and serves as the center of diversity for several groups. The essentially cosmopolitan Menyanthaceae is centered there with three of its five aquatic genera, including *Nymphoides* (water snowflakes). This genus is most diverse in Australia with 20+ species, including *N. exigua*, *N. cristata*, and *N. indica*. The often-aquatic Haloragaceae is also most diverse in Australia with about 20 species of *Myriophyllum* (water mil-foils) alone, including *M. latifolium* and *M. verrucosum*.

Australia also boasts the world’s largest water-lilies and arguably some of the most beautiful tropical water-lilies. The genus *Nymphaea* (Nymphaeaceae) is well represented (subgenera *Anecphyra*, *Brachyceras*, and *Lotos*) in the country and often presents itself as a taxonomic challenge. Unusual flower colors and morphological variations are plentiful, and upon further study may be the basis of naming new species or hybrids. For example, the marked floral variation found in *N. violacea* calls into question its current taxonomic limits. Typically this species has fragrant blue flowers with short stipules. However, atypical white flowered, long-stipuled populations have been found lacking fragrance. Other populations have exhibited unusual purple-striped sepals and peduncles, yet with otherwise typical flowers.

Low Lake in Queensland, which serves as a dumping ground for troublesome crocodiles, hosts a remarkable population of *Nymphaea atrans*. This is typically a “changeable” species, in which the flower color gradually changes over the course of blooming from bluish-white to pink to dark red. At this locale, however, the flower color remains constant during the days of anthesis. Other unusual variations include an odorless night-blooming *N. pubescens*, a diminutive, faint fragranced, day-blooming *N. noucheli*, and a white-flowered *N. immutabilis*. There was a special variant discovered in Queensland with less bronze-colored foliage and purple flowers that may be described as a new species.

In the Kimberley region, one of Australia's last frontiers, other notable Nymphaeaceae were observed. An unusual population of “*Nymphaea immutabilis*” was found as well as typical *Ondinea purpurea*. *Ondinea* is the only monotypic genus in the water-lily family and endemic to Australia. Attempts to cultivate this genus, as well as other Australian water-lilies, have been largely unsuccessful.

Questions and answers followed the well-illustrated slide presentation before members and guests adjourned for the usual refreshments and conversation.