

but we also encourage people to collect their own seed from their own area. We specialise in growing plants for forest restoration projects, pond, wetland or riparian projects, native shelterbelts and plants to attract native birds to the garden.

In autumn we have seed collecting days and in winter days for learning how to grow native plants from cuttings. The nursery is generally open each Friday between October and June.

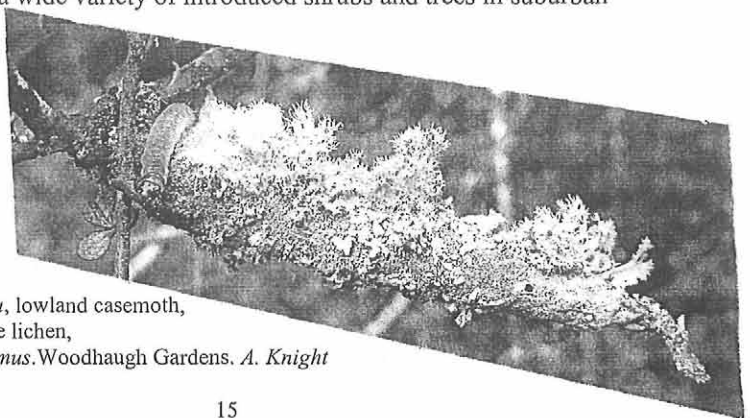
As well as running the nursery we also have on our property a stand of native kahikatea forest (protected by QEII Covenant), a pond and examples of plantings using native plants - shelterbelts, streamside plantings etc. We are happy to show people around - groups or individuals and often host school visits – where students can learn about Southland’s special native plants. As we are located next to Bushy Point Educational Boardwalk, owned by Ian and Jenny Gamble, we often run trips which take in both properties. At Gambles, a boardwalk takes you through tall forest and out to the Estuary where you can see the rare fernbird as well as views across to Bluff Hill and Stewart Island. Visits to both properties are by prior arrangement. If you would like more information or would like to visit, please phone 2131161 (evenings) or email rances@es.co.nz. The Southland Community Nursery web site address is <http://homepages.ihug.co.nz/~rances/> (Interested? The Rances will show BSO around on our 21 August field trip–ed.)

Moths With Portable Homes

Brian Patrick, Otago Museum

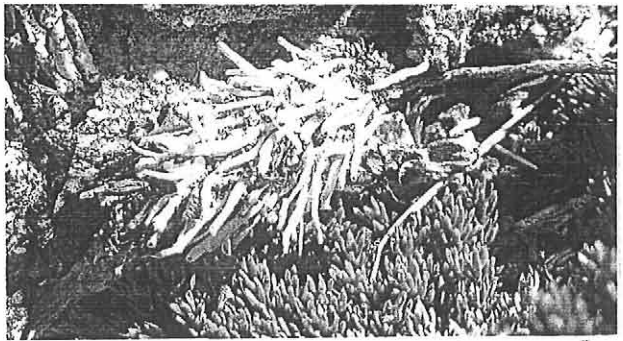
Casemoths belong to the worldwide moth family Psychidae, an ancient family which evolved before many higher plants. The adults are non-feeding and sometimes mouthless and the larvae drag around a silken case decorated with plant material, often lichens. The case is enlarged as the larva grows. Eventually it becomes the protective case around the pupa and for some species it is also the coffin for the wingless female that mates in it, lays eggs there and dies within!

In New Zealand we have about 50 species, many of which are undescribed. Characteristically the wandering larvae are specialist feeders on lower plants such as algae and lichens but several feed on leaf litter. One group, the familiar large casemoth of the New Zealand forest, *Liothula omnivora* is omnivorous as the name implies and has adapted to feeding on a wide variety of introduced shrubs and trees in suburban gardens.



Case of *Liothula omnivora*, lowland casemoth, camouflaged by the orange lichen, *Teloschistes chrysophthalmus*. Woodhaugh Gardens. A. Knight

Case of alpine casemoth, *Orophora unicolor*, covered in cut strands of the white lichen, *Thamnolia vermicularis*. Old Man Range. A. Knight



There are two other large species in New Zealand; one an undescribed *Liothula* that is found in forests and gardens from about Greymouth north, and the alpine casemoth *Orophora unicolor*. The later is distributed throughout the South Island down to 600m in places in Central Otago and also on Mt Anglem on Stewart Island. Its cases are ornately decorated with various lichen or grass species making a spectacular sight as it hauls its cases across high-alpine tundra.

By far the majority of our casemoth fauna consists of much smaller species in the genera *Reductodermes*, *Scoriodyta*, *Mallobathra* and *Grypotheca*. The cases are diagnostic for each genus as are the larval feeding habits. Typically the female casemoth is flightless, either apterous or short-winged and either remaining inside the cases after emergence from the pupa or clinging to the outside of the case awaiting a male. Some *Mallobathra* females are fully winged and fly by day. These genera are found in specialised places from the sub-antarctic islands, through coastal cliffs up to the high-alpine zone, with each species living in a particular habitat and with larvae depending on a certain food source.

Good places to see aggregations of the larval cases of these smaller casemoths are rock faces, tree trunks and clay banks where a covering of algae provides sustenance for the larvae.

Another peculiarity of casemoths is that the fragile males often fly at dawn to seek a female, as this is the time when air is stillest and safest for them. Fewer species are day-flying, delighting to sunbathe and mate on the sunniest days of spring or summer. Because for the majority of species the females are flightless, dispersal is effected by the emerging larvae ballooning to new habitats or hosts with the use of silk in much the same way spiderlings do it.

Meeting reports

Gardens Without Weeds? Annual General Meeting 21 April 2004

Helen Leach, Dept. of Anthropology, Otago University.

Reviewed by Ian Radford

A couple of months ago, at a conference in South Africa, saw a talk by Dave Richardson, a prominent plant invasion ecologist, suggesting that Australian *Eucalyptus* species were mere whimps when it came to invasiveness. Despite the fact that I obviously don't like weeds, my national pride was stung by the inference that Australia's best, the eucalypts, were somehow inferior in invasive ability compared to