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A NOTE ON THE MYRIAPODS (CHILOPODA AND DIPLOPODA) OF REENADINNA YEW WOOD, CO KERRY, IRELAND

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INTRODUCTION

Killarney National Park comprises a diverse 10200 hectare area of woodland, mountain and lakes in Co Kerry, south west Ireland. It protects a wide variety of habitats the most notable of which are the largest remaining oak woodlands in Ireland. Yew Taxus baccata L. occurs as scattered trees throughout these woodlands, however at Reenadinna, on a peninsula between Lough Leane and Muckross Lake, it forms an approximately 28 hectare relatively pure yew wood, the only one of its kind in Ireland. Such woodlands are apparently very rare in Europe, for example they are only recorded from 13 10km squares in Great Britain (Rodwell 1991). Reenadinna represents the only native coniferous woodland of any size in Ireland, although individual yew occurs fairly widely, and in a few places forms groves. At Reenadinna the yew grows on limestone rock, which in places is highly fissured, and through an abundance of limestone boulders. A dense carpet of the moss Thamnobryum alopecurum (Hedw.) covers both the limestone rock and boulders, and between the moss and rock surface there is a thin humus rich soil layer. The flora of the woodland has been documented by Kelly (1981), and is distinctly poor, both in terms of higher and lower plants, especially when compared to that of the Killarney oakwoods. There are scattered deciduous trees and shrubs, especially hazel Corylus avellana L. and holly Ilex aquifolium L. in the yew wood, and these become dominant where the bare limestone is replaced by soil, and where the ground is marshy. Other notable hardwoods present around the edge of the wood are the whitebeam Sorbus anglica Hedl., which is otherwise unknown in Ireland and the Kerry speciality Arbutus unedo L.. Some aspects of the ecology of the site have been studied by Carruthers & Gosler (1995) and Smal & Fairley (1982).

I visited the site on two occasions with the intention of assessing the centipede and millipede faunas. On each occasion I spent 3-4 hours searching for these groups in a variety of microsites as listed below. During the first visit, on 10 November 1999, I sampled an area on the northern side of Muckross peninsula, centred on V959865. On the second visit, 2 December 1999, I searched a nearby area on the southern side of the peninsula at Kilbeg Bay, V955858. On each occasion I restricted my fieldwork to areas where the yew woodland was at its purest, and I took care to ensure that the only dead wood I examined were pieces of dead yew. Field observations were backed up by the collection of small bags of yew leaf litter, moss/soil from boulders, and moss from yew trunks, which were later examined at home. In fact owing to the proliferation of moss there was very little available leaf litter, although some was collected from areas disturbed by deer, especially at the base of some of the larger trees. Much of the woodland showed signs of damage by deer, for example the stripping of bark from tree trunks. Apparently the introduced Japanese sika *Cervus nippon* Temminck are more responsible for this than the natives red deer *Cervus elaphus* L., which tend to stick to more open ground. It was quite noticeable that a fairly dense ground flora, especially of brambles *Rubus* sp. had developed in one place where deer were fenced out.

LIST OF MICROSITES AT REENADINNA YEW WOOD, WHICH WERE CHECKED FOR CENTIPEDES AND MILLIPEDES

Microsite A: Under stones

Centipedes: Geophilus electricus (L) (1 specimen), Necrophloeophagus flavus (De Geer), Lithobius variegatus Leach, Lithobius forficatus (L), Lithobius microps Meinert (1).

Millipedes: Nanogona polydesmoides (Leach), Melogona scutellare (Ribaut) (frequent), Blaniulus guttulatus (Fab), Ophyiulus pilosus (Newport), Brachydesmus superus Latzel.

Microsite B: In yew leaf litter

Millipedes: N. polydesmoides, Cylindroiulus punctatus (Leach), B. superus.

Microsite C: In association with dead yew wood

Centipedes: Brachygeophilus truncorum (Bergsoë & Meinert).

Millipedes: N. polydesmoides, Proteroiulus fuscus (Am Stein) (1), B. superus.

Microsite D: Under moss on well-rotted dead yews

Centipedes: N. flavus, B. truncorum, L. variegatus (1), Litobius borealis Meinert (1). Millipedes: Glomeris marginata (Villers) (1), M. scutellare, C. punctatus, Polydesmus sp. (1), B. superus.

Microsite E: In moss on living yew trees

Centipedes: L. borealis.

Millipedes: C. punctatus, B. superus.

Microsite F: Under rubbish (= a well rotted newspaper)

Centipedes: L. forficatus. Millipedes: C. punctatus.

Microsite G: Under moss, and associated soil on boulders

Centipedes: B. truncorum, L. variegatus, L. borealis (1).

Millipedes: N. polydesmoides, M. scutellare, O. pilosus, B. superus.

Microsite H: Under small pieces of bark on living yew trees

No centipedes or millipedes collected.

SUMMARY OF MICROSITES IN WHICH MYRIAPODS (CHILOPODA AND DIPLOPODA) WERE RECORDED AT REENADINNA YEW WOOD.

| MICROSITE | A | В | С | D | E | F | G |
|------------------|---|---|---|---|---|---|---|
| | | | | | | | |
| G. electricus | * | | | | | | |
| N. flavus | * | | | * | | | |
| B. truncorum | | | * | * | | | * |
| L. variegatus | * | | | * | | | * |
| L. forficatus | * | | | | | * | |
| L. borealis | | | | * | * | | * |
| L. microps | * | | | | | | |
| | | | | | | | |
| | | | | | | | |
| G. marginata | | | | * | | | |
| N. polydesmoides | * | * | * | | | | * |
| M. scutellare | * | | | * | | | * |
| P. fuscus | | | * | | | | |
| B. guttulatus | * | | | | | | · |
| C. punctatus | | * | | * | * | * | |
| O. pilosus | * | | | | | | * |
| Polydesmus sp. | | | | * | | | |
| B. superus | * | * | * | * | * | | * |

DISCUSSION

The most notable finding during this brief survey was that both centipedes and millipedes were very scarce in the yew wood at the time of collection. The only species which occurred as more than occasional individuals were B. truncorum, M. scutellare and B. superus. Of these M. scutellare was probably the commonest millipede in the woodland. All of the lithobiomorph centipedes were markedly scarce, as were the geophilomorphs with the exception of B. truncorum. Numerous, mostly small pieces of dead yew wood were examined, with very little result. The shallow yew leaf litter was virtually devoid of myriapods. The thin layer of dark soil, which had accumulated beneath moss on boulders in the woodland, also supported very few myriapopds. Normally common species, including P. fuscus, O. pilosus and C. punctatus were distinctly scarce, and usually met with as single individuals.

It should be borne in mind that my field work was confined to two short visits during the winter months. In all likelihood visits at different times of the year, or the use of techniques other than hand sorting would reveal the presence of additional species.

REFERENCES

Carruthers, T. D. & Gosler, A. G. (1995) The breeding bird community of Muckross yew wood, Killarney. *Ir. Birds* 5: 308-318.

Kelly, D. L. (1981) The native forest vegetation of Killarney, south-west Ireland: An ecological account. J. Ecol. 69: 437-472.

Rodwell, J. S. (ed.) (1991) British plant communities. Volume 1. Woodlands and scrub. Cambridge University Press, Cambridge.

Smal, C. M. & Fairley, J. S. (1982) The dynamics and regulation of small rodent populations in the woodland ecosystems of Killarney, Ireland. *J. Zool. Lond.* **196**: 1-30.