## **Liverworts in the Stony Bay Stream Valley, Hinewai**

Rodney Lewington<sup>1</sup>

A collection of hornworts and liverworts was made from Hinewai Reserve on Banks Peninsula in January 2005 and reported in Bulletin 50.<sup>2</sup> A further visit was made in January 2007. At that time, the Maurice White Native Trust was negotiating to add a further 168 hectares on the southern boundary of the Reserve, consisting of the upper and middle parts of the Stony Bay Stream valley.<sup>3</sup> This paper records the hornwort and liverworts noted in that area.

The northern side of the valley has a substantial area of mature red beech, *Nothofagus fusca*. This face has dense gorse on most boundaries and there was little evidence of stock in the area. Consequently there is a rich understorey of native trees, shrubs and ferns. This south-facing aspect and mature canopy, together with several permanent streams, results in a moist habitat and ideal bryophyte habitat.

The southern side of the valley is mainly grazed pasture with some eaten out bush patches and extensive areas of mature gorse. It has few bryophyte species. A drier area at the head of the valley consists of bush remnants with rough pasture and a limited bryophyte community.

Two members spent a day and a half collecting in the valley. Only a small part was explored although an effort was made to cover the variety of habitats. These included the rocks, banks and fallen logs in smaller streams, the steep shaded banks of the main stream and the adjacent ridges. The area proved to be much richer in bryophytes than the original area of Hinewai. The drier head of the main stream yielded a few species, which were more typical of the main area of Hinewai.

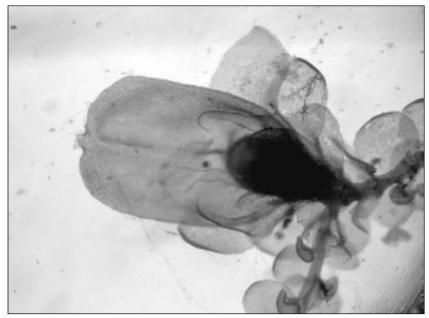
Species not previously found in Hinewai Reserve all require a continually moist habitat to thrive. These include larger species such as *Bazzania adnexa*, *Lepidozia ulothrix*, *Plagiochila gigantea*, *Plagiochilion conjugata*, *Symphyogyna subsimplex* and *Tylimanthus tenellus*.

*Porella elegantula* had been hard to find in the main Hinewai Reserve but was plentiful in this valley. *Harpalejeunea latitans* and *Zoopsis argentea* var. *argentea*, smaller species, were also present in the moist conditions.

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<sup>2.</sup> Lewington R.J. 2007: A preliminary list of liverworts from Hinewai. *Wellington Botanical Society Bulletin No 50*: 15–29.

<sup>3.</sup> The area has, at June 2008, been formally included in Hinewai Reserve.



Perianth of *Frullania deplanata* among *Metzgeria furcata* on stem of *Pseudopanax colensoi* at Stony Bay Stream. The perianth is 1.2 mm wide.

With the additions from the Stony Bay Stream valley, the count of species identified in the expanded Hinewai Reserve, stands at 2 hornworts and 71 liverworts.

## HORNWORT AND LIVERWORT SPECIES RECORDED FROM STONY BAY VALLEY, BANKS PENINSULA

(Centred on NZMG E 25 103 46, N 57 084 30)

## **Hornwort**

Megaceros flagellaris (Mitt.) Steph.

## Liverworts

Acromastigum aff. colensoanum (Mitt.) A.Evans

Austrolejeunea hamata (Grolle) Pocs

Bazzania adnexa (Lehm. & Lindenb.) Trevis. var. adnexa

Chiloscyphus herzogii J.J.Engel & R.M.Schust.

Chiloscyphus lentus (Hook.f. & Taylor) J.J.Engel & R.M.Schust.

Chiloscyphus semiteres (Lehm.) Lehm. & Lindenb. var. semiteres

Chiloscyphus subporosus var. subporosus (Mitt.) J.J.Engel & R.M.Schust.

Diplasiolejeunea plicatiloba (Hook.f. & Taylor) Grolle

Frullania deplanata Mitt.

Frullania monocera (Hook.f. & Taylor) Taylor

Frullania patula Mitt.

Frullania rostrata (Hook.f. & Taylor) Hook.f. & Taylor

Harpalejeunea latitans (Hook.f. & Taylor) Grolle

Heteroscyphus biciliatus (Hook.f. & Taylor) J.J.Engel

Heteroscyphus coalitis (Hook.f.) Schiffn.

Heteroscyphus cuneistipulus (Steph.) Schiffn.

Heteroscyphus normalis (Steph.) R.M.Schust.

Hymenophyton leptopodum (Hook.f. & Taylor) Steph.

Lepidozia ulothrix (Schwaegr.) Lindenb.

Marchantia berteroana Lehm. & Lindenb.

Metzgeria furcata (L.) Dumort.

Monoclea forsteri Hook.

Plagiochila deltoidea Lindenb.

Plagiochila gigantea (Hook.) Dumort.

Plagiochila stephensoniana Mitt.

Plagiochilion conjugatus (Hook.) R.M.Schust.

Porella elegantula (Mont.) E.A.Hodgs.

Riccardia sp. (possibly R. aequitexta (Steph.) E.A.Brown)<sup>4</sup>

Riccardia pusilla (Steph.) E.A.Brown

Symphyogyna subsimplex Mitt.

Trichocolea rigida R.M. chust.

Tylimanthus tenellus (Taylor) Mitt.

Zoopsis argentea var. argentea (Hook.f. & Taylor) Hook.f.

<sup>4.</sup> Two collections key to and agree with the description of *R. aequitexta* but it is difficult to identify this with absolute confidence as the characters of the non-fertile specimens also fit the descriptions of at least two other species.