Carex applanata

Current Threat Status (2016):
At Risk - Naturally Uncommon

Distribution:
Endemic. South Island, Central Otago and Northern Southland Mountains (Pisa, Old Man, Old Woman, The Remarkables and Umbrella Mountains)

Habitat:
Carex applanata is an alpine species of eroding gravel slopes and, less frequently, snowbanks.

Features*:
Perennial herb forming patches to 200 mm diameter, tufts rather rigid, usually matted and flattened, spreading, surrounded by persistent dead leaves. Culms 8–60 × 1.3–2.0 mm, spreading, ± trigonous, edges faintly and usually discontinuously scabrid on one or two edges. Leaves falcate, 10–60 mm long; leaf sheaths stramineous, distinctly wider than leaves, closely sheathing culm; leaf blades channelled, yellow-green, green to bronze green, leaf margins and keel minutely scabrid, tapering to a weakly triquertrous acute tip, this mostly dried and eroded in mature leaves leaving a lacerate sometimes weakly cirrhose stub. Inflorescence a congested cluster of 2–4(–7) dark brown to chestnut-brown similar spikes, the lowermost subtended by a single leaf-like bract; spikes subsessile or sessile, rarely shortly stalked, erect, 4.2–6.3 × 4.2–6.8 mm, usually globose to ovoid, broadly cylindrical when immature, male flowers below female flowers. Glumes = to or slightly exceeding utricles, membranous, concavo-convex to concave; lower glumes narrowly ovate to ovate, acute, usually strongly keeled, keel apex prolonged, acute with keel prolongation extended as a minute scabrid awn; upper glumes ovate to broadly ovate, acute, mostly weakly keeled, keel failing just short of or flush with apex. Stamens 3, anthers 0.8–1.2 mm long, dark golden-yellow. Utricles 2.2–2.4(–2.7) × (1.2–)1.4(–1.9) mm, spreading at maturity, plano-convex, elliptic, elliptic-ovoid to ovoid, smooth, both surfaces weakly nerved, lower portion golden-brown or honey-coloured, upper portion darker golden-brown to brown, weakly winged, margins strongly scabrid in upper half to one-third. Stigmas 2; 0.9–1.2(–2.6) mm long. Achenes (1.0–)1.2 × 0.9(–1.0) mm, ovate to circular, biconvex, smooth, honey-brown; styles persistent.

Flowering: January–April
Fruiting: February–May

Threats:
Carex applanata does not seem to be threatened. Beyond observations of browsing from hares (Lepus europaeus occidentalis), which does not seem to cause the ill-thrift of plants the species seems secure in its alpine habitats. In those areas exotic plant are scarce, the most commonly seen is the hawkweed (Pilosella officinarum), which is not known to co-occur with C. applanata. Although the total area occupied by Carex applanata is believed to be small (c. 4 ha spread over 10 sites), the total number of plants is believed to number in the 1000s. For this reason it is recommended that the species be listed as 'At Risk / Naturally Uncommon' qualified 'Range Restricted' and 'Data Poor'.

*Attribution:
Fact Sheet prepared by P.J. de Lange (16 May 2016). Description adapted from Thorsen & de Lange (2016)

References and further reading:
Thorsen, M.J.; de Lange, P.J. 2016: Carex applanata (Cyperaceae), a new species from southern New Zealand. New Zealand Journal of Botany 54 (2) DOI: 10.1080/0028825X.2016.1167092

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