TRILEPIDEA

NEWSLETTER OF THE NEW ZEALAND PLANT CONSERVATION NETWORK

Please send news items or events to events@nzpcn.org.nz

Postal address: P.O. Box 16-102, Wellington, New Zealand

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Message from the President

The NZ Plant Conservation Network has as one of its objectives: "*To undertake activities to protect New Zealand's indigenous plants throughout their natural range"* This means that from time to time we lobby government on issues that impact on threatened species and their natural habitats. There are few more special and unique habitats than Mt Burnett, adjacent to Kahurangi National Park in Golden Bay. The distinctive geology and topography of Mt Burnett hosts a rare forest type and is home to three species of plant found nowhere else. What also makes this place special is the combination of dolomite, dolomitic marble and coal measures, making Mt Burnett an island of karst sitting in broadleaf forest. Two of the unique plants are featured below in "Plant of the Month". A third is a form of *Gingidia montana*, with 98% of its range on Mt Burnett. The area is also the northern limit for a range of species including the nationally uncommon *Metrosideros parkinsonii* and *Pseudowintera traversii*. It also supports the largest populations of nationally uncommon *Coprosma obconica*. A fact sheet will be produced by the Network about this Important Plant Area in the near future.

Coprosma obconica. Photo: John Smith Dodsworth

Earlier this year we urged the Minister of Conservation to decline a request for access across this land by Omya (NZ) Ltd, who wished to extend their dolomite quarry which covers 128 hectares of land on Mt Burnett. The Hon Chris Carter declined the quarry extension in the short term to enable an assessment to be carried out in the whole issue of dolomite mining on Mt Burnett prior to the expiry of Omya's mining licence in 2006.

Earlier this month the Network wrote to the Prime Minister urging her to protect the area permanently on the expiry of the current mining licence in 2006 and add the area to the Kahurangi National Park. We will also be bringing to member's attention the unique characteristics of this area through the website so that you are better informed of the issues. This is one area we cannot afford to lose.

Website is officially Number 1

The Google Website Ranking system now has the Network website as the Number 1 listed threatened plant conservation website in New Zealand and Number 13 in the world. In addition, the website has now received over 1 million hits in just over 14 months. Hits are not normally used as a good measure of website use or success but this was a significant milestone we thought worth reporting. The site is now being visited by more than 6000 people each month. Please let us know of any improvements you think we can make. Please note that some areas of the site will soon be closed to non-members. A password system will be installed in the near future so that only members can gain access to the information. Some information will remain available to everyone.

Erratum

Eagle eyed readers will have noticed our glaring mistake in the last issue. Trilepidea – the new name for the monthly newsletter was spelt incorrectly. In fact we spelt it incorrectly twice. Firstly we had Trilipedia, then we used Trilepidia. At last after 3 weeks we have finally corrected it to Trilepidea after being advised of our errors by two Auckland botanists. To find out the relevance of the name Trilepidea to the Network, please go to the website and do a "Search for a Species" and type the word as the Latin name.

Plant of the Month

Carex dolomitica.
Photo: Gillian Crowcroft

Myrsine argentea. Photo: Peter de Lange

The Nationally Critical *Carex dolomitica* (Mt Burnett sedge) and the Nationally endangered *Myrsine argentea* (Mt Burnett matipo) are the plants of the month for November. They are two species endemic to Mt Burnett and part of the unique flora of this area - one of New Zealand's most important plant areas. *Carex dolomitica* is a robust bronze-green sedge found on the dolomite and dolomite limestone/marble exposed rock outcrops and *Myrsine argentea* is a shrub or small tree up to 9 m tall found on the dolomite karrenfield and associated cloud forest. The Network fact sheets for these species can be found at the following links:

http://www.nzpcn.org.nz/nz_threatenedplants/detail.asp?PlantID=6

http://www.nzpcn.org.nz/nz_threatenedplants/detail.asp?PlantID=82

Subscription for July 04 to June 05

Annual Network membership subscriptions are due by 30 November. The subscription form can be downloaded from the publications area of the website. Please note - in addition to standard membership costs, we are offering subscriptions to the magazine 'Australasian Plant Conservation' for an extra $30. Four issues of this magazine will be posted to subscribers each year. The magazine has articles about plant conservation in Australasia and will keep you up-to-date with what is going on in the field of plant conservation.

What's happening to *Hebe*?

Phil Garnock-Jones, School of Biological Sciences
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PO Box 600, Wellington.

A recent paper by Albach et al. (2004) proposes, but doesn't formalise, a major change in how botanists classify *Hebe* and related genera. We've always known that *Hebe* and *Veronica* were somehow linked, if only because until 1926 our hebes and parahebes were called *Veronica*. During the second quarter of the 20th century, however, first *Hebe*, then *Parahebe* and *Pygmea* (now *Chionohebe*), were segregated from *Veronica*.

The relationship with *Veronica* has been expressed in three different ways. First, some thought *Hebe* was ancestral to *Veronica*, probably because of the now discredited idea that woody plants are necessarily primitive. Secondly, some thought *Hebe* and *Veronica* were sister groups. Thirdly, some thought *Veronica* was ancestral to *Hebe*.

In the late 20th century and early 21st, there were twin breakthroughs in plant classification. Cladistics formalises arguments about evolution and seeks explicit evidence for these hypotheses. Molecular systematics brings new and high-quality data to bear on these questions. Slowly, the answers to the questions about *Hebe* relationships have become clearer. In a series of papers (Garnock-Jones 1993, Wagstaff & Garnock-Jones 1998, 2000, Wagstaff et al. 2002, Albach & Chase 2002, Albach et al. 2004) it has been shown that the New Zealand hebes, parahebes and their relatives are all closely related and that some have dispersed to Australia, South America, and New Guinea. More importantly, it is now clear (Wagstaff et al. 2002, Albach & Chase 2002) that the New Zealand and Australian members of the *Hebe* complex have evolved from ancestors that were Veronicas. We now also know that the current classification of the *Hebe* complex in New Zealand does not very well reflect their evolutionary history. *Hebe* is made up of two only distantly related groups and *Parahebe* and *Chionohebe* are seemingly inextricably mixed up with each other. This poses several problems for the continued recognition of *Hebe* and related genera.

Hebe salicornioides.
Photo: John Smith-Dodsworth

There are several options, including the following.

- We could recognise a single genus, *Hebe*, for the whole complex in New Zealand, including *Chionohebe*, *Heliohebe*, *Leonohebe*, and *Parahebe*. That would at least allow local species to be classified in the same genus as their nearest relatives, but it would have serious effects on the large northern genus *Veronica*. Under such a scheme, as under the current classification, the nearest relatives of some veronicas would be (mis)classified as hebes. The only solution to that would be to break up *Veronica* into as many as nine genera (Albach et al. 2004). Those nine genera would be based on DNA sequence differences and some would be difficult, perhaps even impossible, to distinguish morphologically.
- Perhaps a better solution is to place all the southern hemisphere plants that are descended from an ancestral *Veronica* into *Veronica*. The main disadvantage of this is that it makes *Veronica* a much larger and more diverse genus. To many people, that disadvantage is outweighed by the advantage that it doesn't misrepresent the evolutionary relationships among these plants and Albach et al. (2004) have proposed this as the preferable solution.

Many New Zealand species, especially those described before 1926, still have legitimate names in *Veronica* that could be used immediately. A few don't have names in *Veronica*, while others have *Veronica* names that are illegitimate.

The situation in respect of *Veronica* is much more complex than I can describe here, and the *Hebe* complex needs to be carefully considered in the light of all its relatives around the world. Albach et al. (2004) provide a thorough discussion of these related plants and they also describe the underlying philosophical and methodological issues surrounding proposed changes in classification. I recommend their article to all who want to understand this issue more deeply.

The final twist in the *Hebe* story is that the genus, along many others, has been removed from the Scrophulariaceae and is now classified in Plantaginaceae. Scrophulariaceae is now a much smaller group than it was. Only one native genus might be classified in Scrophulariaceae: *Myoporum*. The others have been distributed across Calceolariaceae, Orobanchaceae, Plantaginaceae, and Phrymaceae (APG 2003).

References

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Wagstaff, S.J. Garnock-Jones, P.J. 2000: Patterns of diversification in *Chionohebe* and *Parahebe* (Scrophulariaceae) inferred from ITS sequences. *New Zealand Journal of Botany 38*. 389-407.

Wagstaff, S.J.; Bayly, M.J.; Garnock-Jones, P.J.; Albach, D.C. 2002: Classification, origin, and diversification of the New Zealand hebes (Scrophulariaceae). *Annals of the Missouri Botanical Garden 89*: 38—63.

Wagstaff, S.J.; Garnock-Jones, P.J. 1998: Evolution and biogeography of the *Hebe* complex (Scrophulariaceae) inferred from ITS sequences. *New Zealand Journal of Botany 36*: 425–437.

Flora of New Zealand course

This course will be run by the Department of Biological Sciences at University of Waikato from 11–25 Feb, 2005. Open to students with genuine botanical interests in the following three categories: Students completing first year biology and intending to major in plant biology; Second and third year plant biology students; Others with a background in horticulture or botany (will be admitted at discretion of Course Coordinator)

The course begins with a weekend field trip to Pureora Forest Park where a wide range of plant species and habitats will be studied. This is followed by two intensive weeks of lectures and labs at the University, after which students will be expected to complete an individual assignment. The course is internally assessed and final results will be available mid-year.

Topics covered during the course include: The origin of New Zealand's unique flora; The basics of plant taxonomy; Modern methods of plant classification and identification; Field identification of plants.

Obtain a Flora enrolment form from the Dean's office or the Biology Office. Forms must be signed and stamped by Dr. Chrissen Gemmill or Dr Bruce Clarkson before enrolment can proceed. Enquiries to: Dr. Chrissen Gemmill, email c.gemmill@waikato.ac.nz (phone 07 838 4053) Dr.Bruce Clarkson, email b.clarkson@waikato.ac.nz (phone 07 838 4237) Or contact the Department of Biological Sciences (phone 07 838 4022), Waikato University, Private Bag 3105, Hamilton.

Australian Plant Conservation Newsletter

The Dec-Feb issue of Australian Plant Conservation Newsletter produced by the Australian Network for Plant Conservation will be a special edition on: Conserving Plant Diversity in Wetlands. A number of network members are now subscribers to this quarterly magazine. Contributions on wetland conservation/research in New Zealand are welcomed. The next issue will also include a new section titled: Research Group Roundup. This section will summarise the research activities of groups involved in wetland plant conservation. If you want to submit a brief bio (less than 300 words) or an article about wetland conservation the deadline for submissions is 3rd December 2004. Please send submissions to the ANPC National Office (anpc@deh.gov.au).

Comments on new names, new taxa in *Gentianella* and their conservation status

By P.J. de Lange

The long-awaited monograph of the New Zealand *Gentiana* has just been published (Glenny 2004). The monograph places all New Zealand *Gentiana* within *Gentianella* completing a process initiated in 1952 but hinted at for very much longer. *Gentianella* replaces *Chionogentias* proposed for the Australasian and South American "southern gentians" in 1995.

It is good to see a modern treatment of this large New Zealand genus. The last treatment, offered by Allan (1961) is now some 43 years old, and though it has served us well, problems with species boundaries and limits, and some ambiguity over character states had rendered accurate identification of many *Gentianella* (*Gentiana*) particularly difficult. The revision recognises seven new species and six subspecies, and elevates one taxon from the rank of variety to that of species. Four taxa (*Gentiana gracilifolia*, *G. matthewsii*, *G. tereticaulis* and *G. townsonii*) are not upheld and have been reduced to synonymy. Previously, as *Gentiana*, eleven *Gentianella* taxa had been given conservation assessments by the New Zealand Threatened Plant Panel (de Lange et al. 2004), while a further eight, listed as Taxonomically Indeterminate in that paper, were also given provisional conservation ratings, pending resolution of their taxonomic status. Because the NZPCN has a policy of not listing Taxonomically Indeterminate entities, these formally unnamed entities are not provided on our website. However, once taxonomic resolution and publication in the appropriate manner through peer-reviewed literature has become available, notification of the change in status of such entities will be provided, and this may include discussion of their conservation ratings.

Accordingly, the following provides the new names and combinations within *Gentianella* of those taxa treated by de Lange et al. (2004) as *Gentiana*. A concordance of names (provided in brackets or by the, where appropriate, use of their synonymy) is also given for those formerly unnamed entities listed by de Lange et al. (2004), whose taxonomic status has now been resolved by Glenny (2004). In addition six new taxa described by Glenny (2004) i.e., *Gentianella angustifolia* Glenny, *G. decumbens* Glenny, *G. impressinervia* Glenny, *G. chathamica* subsp. *nemorosa* Glenny, *G. corymbosa* subsp. *gracilis* Glenny, and *G. montana* subsp. *ionostigma* Glenny, were not listed by de Lange et al. (2004). For these Glenny (2004) provides conservation assessments based on Molloy et al. (2002), and I comment on these here.

While a truly impressive monograph it is unfortunate that some of the conservation assessments awarded by Glenny using the New Zealand Threatened Species Classification System (Molloy et al. 2002) contradict those provided by de Lange et al. (2004) thereby creating the potential for some confusion for end users concerned with plant conservation. In some cases these disparities seem to have arisen through the lack of implicit wording and appropriate citation of specific criteria used to determine conservation ratings. In others it is not exactly clear what status if any has been decided upon. For this reason I provide comments and clarification, based on my understanding of the New Zealand Threat Classification system (Molloy et al. 2002).

None of the conservation assessments discussed here for new taxa have been officially confirmed by the New Zealand Plant Conservation panel. This is because the conservation status of these taxa, and indeed any other new vascular plant taxa described subsequent to de Lange et al. (2004), will not be considered until the next threatened vascular plant revision due in three years time. Thus the assessments provided by Glenny (2004) for any newly described taxa and my opinions on them as noted here, are on the understanding that they are still provisional. Qualifiers remain as per de Lange et al. (2004) and are not noted here.

CONSERVATION ASSESSMENTS AND COMMENTS

New Genus Combinations

Gentianella astonii* (Petrie) T.N.Ho et S.W.Liu subsp. *astonii

_ *Gentiana astonii* Petrie

COMMENT: With respect to conservation status Glenny (2004) is in agreement with de Lange et al. (2004), he advises "Range Restricted.....some populations may be small and under threat, but in the Waima Valley it is reasonably abundant....."

***Gentianella antarctica* (Kirk) T.N.Ho et S.W.Liu**

_ *Gentiana antarctica* Kirk

COMMENT: Glenny (2004) is in agreement with the conservation assessment provided by de Lange et al. (2004), advising that this species is "Range Restricted.....Not threatened"

***Gentianella antipoda* (Kirk) T.N.Ho et S.W.Liu**

_ *Gentiana antipoda* Kirk

COMMENT: With respect to conservation status Glenny (2004) is in agreement with de Lange et al. (2004), advising that this species is "Range Restricted.....Not threatened"

***Gentianella cerina* (Hook.f.) T.N.Ho et S.W.Liu**

_ *Gentiana cerina* Hook. f.

COMMENT: The conservation status of "Range Restricted" for *G. cerina* given by Glenny (2004) is in agreement with de Lange et al. (2004)

Gentianella chathamica* (Cheeseman) T.N.Ho et S.W.Liu subsp. *chathamica

_ *Gentiana chathamica* Cheeseman

COMMENT: With respect to the conservation status of subsp. *chathamica* Glenny (2004) is in agreement with de Lange et al. (2004), advising that this species is "Range Restricted".

***Gentianella concinna* (Hook.f.) T.N.Ho et S.W.Liu**

_ *Gentiana concinna* Hook. f.

COMMENT: The conservation status of "Range Restricted" for *G. concinna* given by Glenny (2004) is in agreement with de Lange et al. (2004)

***Gentianella filipes* (Cheeseman) T.N.Ho et S.W.Liu**

_ *Gentiana filipes* Cheeseman

COMMENT: Although the conservation status of *G. filipes* is not explicitly provided by Glenny (2004) his statement (p. 489) "Common within its distribution and habitat range" coupled with his figure of its distribution (Fig. 50) seems to indicate that he considered it qualifying for "Range Restricted", that is, it is common within the small area it occupies. This interpretation would accord with the assessment offered by de Lange et al. (2004)

Gentianella filipes. Photo: John Smith Dodsworth

***Gentianella gibbsii* (Petrie) T.N.Ho et S.W.Liu**

_ *Gentiana gibbsii* Petrie

COMMENT: The conservation status of "Range Restricted" for *G. gibbsii* given by Glenny (2004) is in agreement with de Lange et al. (2004). Glenny further adds that the species is common on Mt Anglem which is a Nature Reserve. I am not sure what is meant here. While this high order reserve status does confer extra protection for the species through its "permit only access", with the creation of the Rakiura National Park, Nature Reserve status is now revoked (D.R. Towns *pers. comm*.), though it is still an offence to collect specimens without the required permit(s).

***Gentianella lilliputiana* (C.Webb) Glenny**

_ *Gentiana lilliputiana* C.Webb

COMMENT: The conservation status of "Range Restricted" for *G. lilliputiana* given by Glenny (2004) is in agreement with de Lange et al. (2004)

***Gentianella lineata* (Kirk) T.N.Ho et S.W.Liu**

_ *Gentiana lineata* Kirk

COMMENT: Glenny (2004) states "Widespread, not uncommon and not threatened". The distribution map provided by Glenny (2004, p. 496 (Fig. 54)) certainly suggests this is the case although the lack of dates for the collections used to make the map and the absence of a full list of specimens examined are factors which need to be considered further before any definitive ruling on this species conservation assessment can be made.

New Species Combination

***Gentianella magnifica* (Kirk) Glenny**

_ *Gentiana bellidifolia* var. *magnifica* Kirk

COMMENT: Glenny (2004) states "Nationally Endangered" .....as it is only known recently from a single site with under 1000 individuals. There appear to be no threats to this population". However, field work undertaken over the least four years indicates that *G. magnifica* while never particularly common, is not confined to one site, and it has been collected sporadically on several mountain ranges over the last two-three years (e.g., AK 285229). There are also more than 1000 plants known (C.J. Jones *pers. comm.*; P.J. de Lange *pers. obs*.). Therefore its provisional status as "Range Restricted" (listed as *Gentianella bellidifolia* var. *magnifica*) (see de Lange et al. 2004, p. 63) should remain unchallenged.

New Taxa

***Gentianella astonii* subsp. *arduana* Glenny et Molloy**

(*Gentiana* aff. *astonii* (d) (CHR 529114; Ward)

(*Gentiana* aff. *astonii* (f) (CHR 279272; Chalk Range)

COMMENT: Two informal entities listed by de Lange et al. (2004) (see above) are treated collectively by Glenny (2004) within his subspecies *arduana*. Both were given provisional assessments of "Range Restricted" (see de Lange et al. 2004, p. 71), assessments accepted by Glenny (2004).

Gentianella calcis* Glenny et Molloy subsp. *calcis

(*Gentiana astonii* (c) (CHR 519113; Awahokomo)

COMMENT: Glenny (2004) considers this taxon as "Nationally Critical.....as the subspecies is known from one population of fewer than 250 plants. The number of plants present seems to vary from year to year, possibly because of grazing pressure by rabbits and variation in summer dryness". Glenny (2004) is correct that this taxon should have been assessed as "Nationally Critical" but not due to the reasons offered in that paper. While the numbers of plants can fluctuate (hence the qualifier "EF" (Extreme Fluctuation")), more than 250 specimens have been recorded over some five years of monitoring, nor is the suggested risk of browse pressure valid. This *Gentianella* is rarely if ever browsed (B. P. J. Molloy *pers. comm*.; P.J. de Lange *pers. obs*.), and indeed it is one of the few limestone endemics of the Awahokomo area to grow, flower, seed and regenerate within pasture accessible to livestock, and rabbits. However the taxon does qualify as Nationally Critical because it is confined to a single site with an area of occupancy < 1 ha, so meeting the criteria of Molloy et al. (2002) for that conservation rating.

***Gentianella calcis* subsp. *manahune* Glenny et Molloy**

(*Gentiana* aff. *astonii* (c) (CHR 542276; Manahune)

COMMENT: The conservation status of this subspecies as given Glenny (2004) is in agreement with that provisionally offered for this taxon as *Gentiana* aff. *astonii* (c) by de Lange et al. (2004). Glenny observed that there are 35 plants known with certainty and that the total population is unlikely to exceed 100 individuals. This is the most seriously threatened of the entire *Gentianella calcis* complex.

***Gentianella calcis* subsp. *taiko* Glenny et Molloy**

(*Gentiana* aff. *astonii* (b) (CHR 529111; Pareora River)

COMMENT: The conservation assessment provided by Glenny (2004) is in agreement with that provisionally offered for this taxon as *Gentiana* aff. *astonii* (b) by de Lange et al. (2004).

***Gentianella calcis* subsp. *waipara* Glenny et Molloy**

(*Gentiana* aff. *astonii* (a) (CHR 529112; Mt Brown)

COMMENT: The conservation assessment provided by Glenny (2004) is in agreement with that provisionally offered for this taxon as *Gentiana* aff. *astonii* (a) by de Lange et al. (2004). However, de Lange et al. (2004) provided their assessment based on the information that this taxon was endemic to the Waipara area of North Canterbury. Subsequently Glenny (2004) admitted plants from Duntroon, North Otago discovered in May 2004 within his circumscription of subsp. *waipara*. Concerning these Duntroon plants, Glenny (*pers. comm*.) has advised me that they are somewhat different, and that in the opinion of B. P.J. Molloy another name may need to be created for them.

***Gentianella luteoalba* Glenny**

(*Gentiana* (a) (CHR 395723; Lookout Range)

COMMENT: Rated as "Nationally Vulnerable" by Glenny (2004) who states that there are less than 5000 plants in the wild and that this species' area of occupancy is less than 100 ha. However Glenny then adds (p. 498) that the number of plants "estimated in the field [are] in the thousands, occupying all available habitat. There appear to be no threats to this large population". Based on this comment and the evidence reviewed by the threatened plant panel in 2001it is suggested that the provisional listing of "Range Restricted" (as *Gentiana* (a)) offered by de Lange et al. (2004) is more appropriate.

***Gentianella scopulorum* Glenny**

(*Gentiana* aff. *saxosa* (AK 7316; Charleston)

COMMENT: The conservation assessment provided by Glenny (2004) is in agreement with that provisionally offered for this taxon as *Gentiana* aff. *saxosa* by de Lange et al. (2004).

***Gentianella stellata* Glenny**

(*Gentiana* aff. *tenuifolia* (CHR 387194; "stellar")

COMMENT: No conservation assessment is provided by Glenny (2004) who states "Confined to ultramafic areas in Nelson but abundant there and not threatened". These statements are in agreement with the definition of "Range Restricted" taxa offered by Molloy et al. (2002) and so the current provisional listing of this taxon (as *Gentiana* aff. *tenuifolia*) as "Range Restricted" by de Lange et al. (2004) remains unchallenged.

Conservation assessments of new *Gentianella* taxa additional to those listed by de Lange et al (2004)

Gentianella angustifolia Glenny

COMMENT: This new species is described by Glenny (2004) as "common through its range". However, the distribution map provided by Glenny (2004, p. 461, Fig. 34) indicates that this species may qualify as "Range Restricted". Further consideration of this species conservation status is probably needed.

Gentianella chathamica subsp. *nemorosa* Glenny

COMMENT: Glenny (2004, p. 479, Fig. 45) advises that this new subspecies is "widespread in the central North Island, but apparently never abundant. The habitat is not threatened". Based on the distribution map (Fig. 53), and the recognition that it under represents known occurrences of this taxon the assessment offered

seems appropriate. Nevertheless field observations indicate this species is naturally sparse in its occurrences, so further consideration of this species conservation status is needed.

Gentianella corymbosa subsp. *gracilis* Glenny

COMMENT: Glenny (2004, p. 484) states "common in areas where found", and Fig. 46 within the same publication indicates a very wide distribution. Accordingly the implied conservation status of "Not Threatened" by Glenny's statement seems appropriate.

Gentianella decumbens Glenny

COMMENT: With regard to the conservation of this species Glenny (2004, p. 486) states "restricted in distribution and not common, but not threatened at present". However, the distribution he has given (p. 486, and Fig. 48) is comparable to that given for *G. luteoalba* (a "Range Restricted" taxon see above), and the wording provided by Glenny suggests that this species would probably qualify as "Range Restricted". Further consideration of this species conservation status is needed.

Gentianella impressinervia Glenny

COMMENT: Glenny (2004, p. 494) describes this species as "widespread and common in some localities, not threatened'. Based on the distribution map (Fig. 53) this assessment seems valid.

Gentianella montana subsp. *ionostigma* Glenny

COMMENT: Glenny (2004, p. 500, Fig. 57) states "common in the alpine zone, at least in the southern North Island", and his distribution notes (p. 500) and figure indicate it is very widespread. Therefore the implied assessment of "Not Threatened "seems valid.

Acknowledgements

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New Book Announcement: Alan Esler's *Wild Plants in Auckland*

Wild plants may be as simple as a weedy patch in a garden or as complex as native forest in a bushy gully. A large proportion of Auckland's living landscape is made up of urban plants growing without intentional human aid. Every kind of plant is different, in its form, its requirements and tolerances, its life history and its influence on other plants. In words, and in exquisite line drawings and colour photographs, this fascinating and approachable book by an expert in the field tells the story of 322 species that grow wild in New Zealand's largest city.

The first part of the book demonstrates the place of wild plants in the urban vegetation, showing in detail how today's landscape evolved. The second explores some of the ways in which these plants impinge on our lives, in building and farming, in parkland and forest walks, and in science. The last section tells how they are structured for their various roles in the plant communities. Alan Esler's

enthusiasm for his subject, his wide experience and knowledge of Auckland's rich and varied flora and his awareness of the wider context in which plants live and grow make this a remarkable book. Students, teachers, managers of turf, weeds and trees, gardeners and everybody who appreciates Auckland's unique environment will be intrigued and informed by *Wild Plants in Auckland*. Alan Esler was for many years DSIR Regional Botanist based at the Mt Albert Research Centre and is the author of many publications on the botany of the Auckland region. *Wild Plants in Auckland by* Alan Esler is published by Auckland University Press (RRP $NZ 39.99).

Upcoming events

If you have important events or news that you would like publicised via this newsletter please email the Network (events@nzpcn.org.nz):

Wellington Botanical Society - Evening talk - "Global Plant Conservation in New Zealand – a way forward in the 21st Century" Monday 15 November: Speaker: John Sawyer, Wellington Conservancy, Department of Conservation. John will outline new developments in plant conservation and options for the future. Meetings are usually held at 7.30 pm on the third Monday of each month at Victoria University, Wellington, Lecturer Theatre M101, ground floor Murphy Building, west side of Kelburn Parade. Enter building off Kelburn Parade about 20m below pedestrian overbridge.

Botanical Society of Otago –Weekend trip to Hinewai on the gorgeous Banks Peninsula. Saturday 13 November to Sunday 14 November. Against the backdrop of this impressive landscape, come and see old growth and regenerating vegetation ranging from sub-alpine, through red beech forest, to coastal/maritime vegetation, and including a number of Banks Peninsula endemics. Hugh Wilson will take us on a personalised tour of the reserve. There are 12 beds on site for those interested in staying. Please contact Ian Radford (w 479 9065 or h 472 7470) or Hugh himself (03 304 8501) to book a bed. Contact Ian Radford, phone: (03) 479 9065.

Wanganui Museum Botanical Group - Saturday 4 December: Okehu Stream mouth, west of Mowhanau Beach. A trip to see one of two lowland sites in the North Island with the small daisy *Euchiton* (*Gnaphalium*) *polylepis*. West of Mowhanau, it is accessible on foot, close to the Okehu Stream mouth, but with a small boat in the stream we hope to assess its full range and numbers. We will walk the beach from Kaiiwi Stream and, along the way, check cliff vegetation for the threatened button-daisy *Leptinella* (*Cotula*) *dispersa* subsp. *rupestris*. Meet outside Wanganui Police Station at 8.30 am or Mowhanau (above Kaiiwi Stream) at 9 am. Leader: Jim Campbell.

Botanical Society of Otago – Weekend trip to Piko Piko- Saturday 4 December, 2004. Start time: 9:00 AM. Weekend trip to see the fabulous fossil forest at Piko Piko, with Geologist Dr Daphne Lee, who suggests visiting one or two other paleobotanical sites between Dunedin and Gore en route. We could visit the fossil forest in the mid afternoon, stay the night at Tuatapere, and return to Dunedin on Sunday afternoon after visiting the tall totaras and perhaps other remnants of Southland forests. Back up date if the river is too high for access 11–12 Dec. Bookings essential. Contact Ian Radford (w 479 9065 or h 472 7470) to book a place.

Wellington Botanical Society - Saturday 4/Sunday 5 December: Field trip – Horowhenua reserves. Overnight in the Horowhenua. Saturday: botanise "Stuart Creek", Ohau Valley, virgin lowland podocarp forest, Tararua Forest Park near Levin – wet habitat with a wide range of filmy ferns and herbaceous plants. Meet Levin railway station 9am. Sunday: botanise Paranui Bush in Himatangi Scientific Reserve near Foxton – a lowland dune forest containing totara, tawa, nikau, pukatea, Carmichaelia australis and more. Meet: Foxton windmill, 9 a.m. Levin contact: Leita Crystal 06 363 8245. Wellington contact Sunita Singh 04 387 9955. Accommodation: first choice Waitarere Beach Holiday Camp: tent $10, cabin $18. Ph: 06 368 8732.

Wanganui Museum Botanical Group – Evening meeting – 7th December: End of year social evening. The first Tuesday of each month in the Museum's Davis Lecture Theatre; commencing 8 pm summer (i.e. daylight saving) time; 7.30 pm winter time (April–October).

Botanical Society of Otago – Evening meeting - Developing an urban sanctuary - the Karori Experience. Wednesday 8 December, 2004. Start time: 5:20 PM. Finish time: 7:00 PM. A talk by Diane Campbell-Hunt, author of Developing a Sanctuary – the Karori Experience (2002), available from the Karori Wildlife Sanctury bookshop. The talk will cover: the history of the Karori Sanctuary project; the challenges they faced in getting the project underway and how they dealt with those challenges; and their long-term restoration goals, including progress to date. At the NEW Zoology Benham Building, 346 Great King Street, behind the Zoology car park by the Captain Cook Hotel. Use the main entrance of the Benham Building to get in and go to the Benham Seminar Room, Rm. 215, 2nd floor. Please be prompt as we have to hold the door open. Contact Ian Radford, phone: (03) 479 9065.

Wellington Botanical Society - Saturday 11 December: Field trip – Hutt City rata walk – Crimson Trail. Walk through Hutt city suburbs to see about 40 northern and southern rata – 11 km or shorter to suit. Meet: 9 a.m. Hutt City Information Office, The Pavilion, Laings Road. Leader: Dave Holey, ph 566 3124. Stagecoach Flyer bus: Courtenay Place 8.05 a.m. Queensgate 8.30 am.