

Sagina procumbens 简体中文 正體中文

System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Caryophyllales	Caryophyllaceae

Common name

Synonym

Similar species

Sagina nodosa

Summary

Sagina procumbens is a herb native to Eurasia and North Africa. It has become naturalised in temperate regions and is invasive in some sub-Antarctic islands. It forms dense mats, threatening the integrity of terrestrial ecosystems. Once it becomes established it can be difficult to eradicate due to its persistence in the seed bank.



[view this species on IUCN Red List](#)

Species Description

Sagina procumbens is a mat-forming plant with narrow leaves, ending in a bristle-like point, and tiny flowers which usually have no petals, or occasionally have 4 minute green petals (National Museums and Galleries of Northern Ireland and Environment and Heritage Service, 2008). It often forms a rosette of leaves, from which one or more stems develop. These stems are bright green, glabrous, and tend to sprawl across other stems or the ground. Pairs of opposite leaves occur at intervals along the stems. Each pair of leaves merge together and wrap around the stem, which is slightly swollen where each pair of leaves occurs. Each leaf is about $\frac{1}{2}$ " long and bright green like the stems. It is linear, glabrous, and smooth along the margins. The stems often terminate in either individual flowers or small cymes of flowers. Each flower is up to $\frac{1}{4}$ " across when fully open, consisting of 4 green sepals, 0-4 white petals, 4 stamens with white anthers, 4 white styles, and a green ovary that contains the developing seeds. The sepals are oblong-ovate and persistent. The petals are usually shorter and more narrow than the sepals; they are often missing or poorly developed in individual flowers. The blooming period occurs from mid- to late spring and lasts about 1 month for a colony of plants. There is no noticeable floral scent. The ovary of each flower develops into an ovoid seed capsule that is white and membranous; there are 4 blunt teeth along its upper rim. Each capsule contains several dark tiny seeds that can be blown about by the wind. The surface of each seed is minutely pebbly. The root system consists of a slender taproot that is shallow and divides frequently into secondary roots. This plant spreads by reseeding itself and it often forms small colonies of plants with a mossy appearance. (Hilty, 2006).

Habitat Description

Sagina procumbens grows on sandy ridges, in open woodlands, rocky open ground, and cracks between bricks and patio blocks. It can be found in either natural or disturbed areas where there is scant vegetation on the ground (Hilty, 2006). In its native range, it is found to grow in a variety of situations, such as on lawns, flower beds, pathways, walls, along streams, in ditches and in short grass. It has been recorded at an altitudinal range of 420m (National Museums and Galleries of Northern Ireland and Environment and Heritage Service, 2008); depending on climate, it may well occur much higher elsewhere (or not reach that altitude at all) (Niek Gremmen., pers.comm., July 2008). \r\n .

Reproduction

Perennial plant (USDA, NRCS, 2008).

General Impacts

Once established, *Sagina procumbens* can form large, dense mats. It is a serious threat to native vegetation and soil fauna communities on the cold, oceanic islands where it has been introduced. It takes only a few months for *Sagina procumbens* seedlings to reach maturity and produce a large number of small, easily dispersed seeds, and seeds can persist in the soil for a long time (Gremmen *et al.* 2001).

Management Info

Chemical: Paraquat and Diquat will kill seedlings on contact, but more mature plants will require a systemic like Glyphosate. It will probably take more than one application due to the presence of seed. On lawns, a selective herbicide (singular, or a weed-and-feed type) will require a few applications due to persistence of seed in the soil bank (DGS, 2008).

Integrated management: The eradication of *Sagina procumbens* from Gough Island was carried out in the following stages:

Containment: This was carried out on Gough Island by removing all plants seen, and storing them in strong plastic bags for later removal from the island.

Removal: Every plant was then removed, plus the soil around it to a depth of 15 cm. The remaining soil was treated with boiling water, to reduce the number of viable seeds in the seedbank. Herbicides were used to kill those plants that were growing in inaccessible places.

Ongoing removal and preventative measures: The final stage involved removing all plants that germinated from the small number of remaining seeds. This stage is considered essential to ensure the eradication is successful, as are strict quarantine measures (Gremmen *et al.* 2001).

Principal source:

Compiler: IUCN SSC Invasive Species Specialist Group (ISSG) with support from the EU-funded South Atlantic Invasive Species project, coordinated by the Royal Society for the Protection of Birds (RSPB)

Review: Niek Gremmen Data-Analyse Ecologie, Diever The Netherlands

Publication date: 2008-06-23

ALIEN RANGE

[3] AUSTRALIA
[1] FALKLAND ISLANDS (MALVINAS)
[1] JAPAN
[1] SAINT HELENA
[2] SOUTH AFRICA

[23] UNITED STATES

[1] CHILE
[15] FRENCH SOUTHERN TERRITORIES
[43] NEW ZEALAND
[1] SOLOMON ISLANDS
[1] SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS

BIBLIOGRAPHY

45 references found for ***Sagina procumbens***

Management information

[Anderson, Christopher B., Clayton R. Griffith, Amy D. Rosemond, Ricardo Rozzib, Orlando Dollen. 2006. The effects of invasive North American beavers on riparian plant communities in Cape Horn, Chile Do exotic beavers engineer differently in sub-Antarctic ecosystems? *Biological Conservation*. 128 \(4\): 467-474.](#)

Summary: Available from: <http://captura.uchile.cl/dspace/bitstream/2250/2637/1/Anderson%20CB-Effects.pdf> [Accessed 1 May 2008]
[Cooper, J. and Glass, J. 2006. Eradicating invasive species in the United Kingdom Overseas Territory of Tristan da Cunha IUCN SSC Invasive Species Specialist Group \(ISSG\). Aliens 2001 No 23.](#)

Summary: Available from: http://www.issg.org/aliens_newsletter/A23.pdf [Accessed 1 May 2008]

[Department of Environment and Heritage., 2004. Scott Creek Conservation Park \(NPWS\) Biological Survey South Australia. Interim Flora Species List](#)

Summary: Available from: http://spatialinformationday.org.au/biodiversity/pdfs/species_lists/flora/scott_creek_cp_family.pdf [Accessed 1 May 2008]

Global Invasive Species Database (GISD) 2026. Species profile *Sagina procumbens*. Available from: <https://www.iucngisd.org/gisd/species.php?sc=1394> [Accessed 02 February 2026]

[Gaston, Kevin J., Alex G. Jones, Christine Haanel and Steven L. Chown., 2003. Rates of species introduction to a remote oceanic island. The Royal Society. Proc. R. Soc. Lond. B \(2003\) 270, 1091–1098](#)

Summary: Available from: <http://journals.royalsociety.org/content/3q8lmwktv438212g/fulltext.pdf> [Accessed 1 May 2008]

[Gremmen, N., Barendse, J. and Orr, I. 2001. Invasion and eradication of *Sagina procumbens* L. \(Procumbent pearlwort\) on Gough Island. IUCN SSC Invasive Species Specialist Group \(ISSG\). Aliens 2001 No 14.](#)

Summary: Available from: http://www.issg.org/aliens_newsletter/Aliens14.pdf [Accessed 1 May 2008]

Gremmen, N.J.M. 1999. Recent introduction of *Sagina procumbens* (procumbent pearlwort), a potential threat to Gough Island natural ecosystems. Unpublished report of the *Sagina* eradication program to the Tristan Administration.

Gremmen, N.J.M. & Bardense, J. 2000. Eradication of *Sagina procumbens* (procumbent pearlwort) in the Gough Island Wildlife Reserve Report on the expeditions of May/July and September 2000. Unpublished report of the *Sagina* eradication program to the Tristan Administration.

[Hulle, Maurice., D. Pannetier, J.-C Simon, P. Vernon and Y. Frenot., 2003. Aphids of sub-Antarctic îles Crozet and Kerguelen: species diversity, host range and spatial distribution. Antarctic Science 15 \(2\): 203–209 \(2003\)](#)

Summary: Available from: http://www.issg.org/aliens_newsletter/Aliens14.pdf [Accessed 1 May 2008]

[Jesson, Linley, Dave Kelly and Ashley Sparrow., 2000. The importance of dispersal, disturbance, and competition for exotic plant invasions in Arthur's Pass National Park, New Zealand. New Zealand Journal of Botany, 2000, Vol. 38: 45–1468](#)

Summary: Available from: http://v8nu74s71s31g374r7ssn017uloss3c1vr3s.unbf.ca/~jesson/publications_files/jesson_kelly_sparrow.pdf [Accessed 1 May 2008]

[Mito, Toshikazu and Tetsuro Uesugi., 2004. Invasive Alien Species in Japan: The Status Quo and the New Regulation for Prevention of their Adverse Effects. Global Environmental Research 8\(2\)/2004: 171–191](#)

Summary: Available from: <http://www.airies.or.jp/publication/ger/pdf/08-02-08.pdf> [Accessed 1 May 2008]

[Plant Pathology, Physiology and Weed Science \(PPWS IPM\)., 2008. Weeds of Container Nurseries in the United States](#)

Summary: Available from: <http://ppwsipm.contentsrvr.net/pearlwort.php> [Accessed 1 May 2008]

Rudge, M. R. and D. J. Campbell., 1977. The history and present status of goats on the Auckland Islands (New Zealand subantarctic) in relation to vegetation changes induced by man. New Zealand Journal of Botany, 1977, Vol. 15: 221–53.

[UKOTCF Database, undated. Eradication of Procumbent Pearlwort *Sagina procumbens*, at Gough Island, Tristan da Cunha](#)

Summary: Available from:

<http://www.ukotcf.org/asp/cpview/CPview.asp?FUNC=CDETAIL&SCRN=DETAIL&DETL=SCREEN1&NAVN=MOVEREC&CREC=PJ114> [Accessed 1 May 2008]

[West, C.J., 1999. Poor Knights Islands weed control programme. Conservation Advisory Science Notes No. 233, Department of Conservation, Wellington.](#)

Summary: Available from: <http://csl.doc.govt.nz/upload/documents/science-and-technical/casn233.pdf> [Accessed 1 May 2008]

General information

[Broughton, David A. and James H. McAdam., 2002. The Vascular Flora of the Falkland Islands: an Annotated Checklist and Atlas. Falklands Conservation](#)

Summary: Available from: http://www.falklandsconservation.com/wildlife/flora_chklist.html [Accessed 1 May 2008]

Chapuis, J.L., Frenot, Y., & Lebouvier, M. 2004. Recovery of native plant communities after eradication of rabbits from the subantarctic Kerguelen Islands, and influence of climate change. Biological Conservation, 117, 167–179.

Summary: Cet article décrit les modifications de la composition floristique, de la richesse spécifique et de l'abondance avant et après l'éradication du lapin. L'impact de l'éradication du lapin et des changements climatiques sont discutés.

Chown, Steven L., Ana S.L. Rodrigues, Niek J.M. Gremmen, Kevin J. Gaston 2001. World Heritage Status and Conservation of Southern Ocean Islands Conservation Biology 15 (3) , 550–557

[Down Garden Services. 2008. Pearlwort.](#)

Summary: Available from: <http://www.dgsgardening.btinternet.co.uk/pearlwort.htm> [Accessed 17 June 2008]

[Farmer, C. Undated. Skye flora: Procumbent pearlwort, *Sagina procumbens*.](#)

Summary: Available from: <http://plant-identification.co.uk/skye/caryophyllaceae/sagina-procumbens.htm> [Accessed 17 June 2008]

Fineran, B.A. 1973. A botanical survey of seven mutton-bird islands, South-west Stewart Island. Journal of the Royal Society of New Zealand. 3 (4): 475–526.

[Frenot, Y., Chown, S.L., Whinam, J., Selkirk, P., Convey, P., Skotnicki, M., & Bergstrom, D. 2005. Biological invasions in the Antarctic: extent, impacts and implications. Bio. Rev. 80, 45–72.](#)

Summary: Article de synthèse sur les invasions biologiques (plantes, invertébrés et vertébrés) en antarctique.

Available from: <http://www.anta.canterbury.ac.nz/resources/non-native%20species%20in%20the%20antarctic/Talk%2020%20Frenot.pdf> [Accessed 4 April 2008]

Frenot, Y., Gloaguen, J., Massé, L., & Lebouvier, M. 2001. Human activities, ecosystem disturbance and plant invasions in subantarctic Crozet, Kerguelen and Amsterdam Islands. Biological Conservation, 101, 33–50.

Summary: Cette article propose une liste des plantes exotiques pour 3 des îles subantarctiques françaises. Le rôle passé et présent des activités humaines dans les phénomènes d'invasions est discuté.

Garnock-Jones, P.J., 1981. Checklist of dicotyledons naturalised in New Zealand 8. Aizoaceae, Caryophyllaceae, and Portulacaceae*. New Zealand Journal of Botany, 1981, Vol. 19:59–65

Given, David, R., 1972. Naturalised Flowering Plants in South-west Fiordland. New Zealand Journal of Botany 11: 247–50.

[Global Biodiversity Information Facility \(GBIF\). 2008. Species: *Sagina procumbens* L. Procumbent Pearlwort](#)

Summary: Available from: <http://data.gbif.org/species/13738215> [Accessed 15 June 2010]

[Global Compendium of Weeds \(GCW\)., 2008. *Sagina procumbens* \(Caryophyllaceae\)](#)

Summary: Available from: http://www.hear.org/gcw/species/sagina_procumbens/ [Accessed 1 May 2008]

Gremmen, N.J.M. and V.R. Smith., 1999. New records of alien vascular plants from Marion and Prince Edward Islands, sub-Antarctic. Polar Biol (1999) 21: 401–409

Global Invasive Species Database (GISD) 2026. Species profile *Sagina procumbens*. Available from:

<https://www.iucngisd.org/gisd/species.php?sc=1394> [Accessed 02 February 2026]

[Heckman, Charles W., 1999. The Encroachment of Exotic Herbaceous Plants into the Olympic National Forest. Northwest Science, Vol. 73, No. 4, 1999](#)

Summary: Available from: http://www.fs.fed.us/pnw/pubs/journals/pnw_1999_heckman001.pdf [Accessed 1 May 2008]

[Hilty, J. 2006. Illinois wildflowers: Procumbent pearlwort.](#)

Summary: Available from: http://www.illinoiswildflowers.info/weeds/plants/pr_pearlwort.htm [Accessed 17 June 2008]

[ITIS \(Integrated Taxonomic Information System\), 2008. Online Database *Sagina procumbens* L.](#)

Summary: An online database that provides taxonomic information, common names, synonyms and geographical jurisdiction of a species. In addition links are provided to retrieve biological records and collection information from the Global Biodiversity Information Facility (GBIF) Data Portal and bioscience articles from BioOne journals.

Available from: http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=20034 [Accessed 1 May 2008]

[Johnson, P.N., 1982. Naturalised plants in south-west South Island, New Zealand. New Zealand Journal of Botany, 1982, Vol. 20 : 131-142](#)

[Johnston F. M, Pickering CM. 2001. Alien Plants in the Australian Alps. Annex: Table 4. Mountain Research and Development 21.3: A1◆A5.](#)

Summary: Available from: http://www.mrd-journal.org/pdf/mred_2103_johnston_table4.pdf [Accessed 1 May 2008]

[Meurk, Colin D., M.N. Foggo and J. Bastow Wilson., 1994. The Vegetation of Sub- Antarctic Campbell Island. New Zealand Journal of Ecology \(1994\) 18\(2\): 123-169.](#)

[National Museums and Galleries of Northern Ireland and Environment and Heritage Service. 2008. Flora of Northern Ireland: *Sagina procumbens*.](#)

Summary: Available from: <http://www.habitas.org.uk/flora/species.asp?item=3044> [Accessed 17 June 2008]

[Penskar, M.R. 2008. Special Plant Abstract for *Sagina nodosa* \(pearlwort\). Michigan Natural Features Inventory, Lansing, MI. 3 pp.](#)

Summary: Available from: http://web4.msue.msu.edu/mnfi/abstracts/botany/Sagina_nodosa.pdf [Accessed 1 May 2008]

[Ryan, P.G.; Smith, V.R.; Gremmen, N.J.M. 2003. The Distribution and Spread of Alien Vascular Plants on Prince Edward Island. African Journal of Marine Science, Volume 25, Number 1, June 2003 , pp. 555-562\(8\)](#)

[Sayce, K., 2004. Cape Disappointment State Park Plants, Pacific County, Washington](#)

Summary: Available from: <http://www.reachone.com/columbiacoastplants/documents/Cape%20D%208-04.pdf> [Accessed 1 May 2008]

[Shanklin, Jonathan., 2006. The flora of King Edward Point & Grytviken](#)

Summary: Available from: http://www.antarctica.ac.uk/met/jds/natural_history/bird_island/KEP_FLORA.htm [Accessed 1 May 2008]

[State of Conservation of World Heritage Properties in Europe United Kingdom Gough and Inaccessible Islands.](#)

Summary: Available from: <http://whc.unesco.org/archive/periodicreporting/EUR/cycle01/section2/740-summary.pdf> [Accessed 1 May 2008]

[State of the Environment \(SOER\) South Africa., 2005. Antarctic & Islands, Gough Island](#)

Summary: Available from: <http://soer.deat.gov.za/themes.aspx?m=253> [Accessed 1 May 2008]

[United Nations Environment Programme-World Conservation Monitoring Centre \(UNEP-WCMC\).., 2004. Protected Areas and World Heritage, COUNTRY United Kingdom NAME Gough Island Wildlife Reserve](#)

Summary: Available from: <http://www.unep-wcmc.org/sites/wh/gough.html> [Accessed 1 May 2008]

[USDA, ARS, 2008. *Sagina procumbens*. National Genetic Resources Program. Germplasm Resources Information Network - \(GRIN\) \[Online Database\]. National Germplasm Resources Laboratory, Beltsville, Maryland.](#)

Summary: Available from: <http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?310846> [Accessed 1 May 2008]

[USDA, NRCS. 2008. *Sagina procumbens*. The PLANTS Database \(<http://plants.usda.gov>, 30 April 2008\). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.](#)

Summary: Available from: <http://plants.usda.gov/java/profile?symbol=SAPR> [Accessed 1 May 2008]

Vidal, Eric; Pierre Jouventin; & Yves Frenot, 2003. Contribution of alien and indigenous species to plant-community assemblages near penguin rookeries at Crozet archipelago. Polar Biol (2003) 26: 432◆437

Walton, D. W. H. 1975. European weeds and other alien species in the Subantarctic Weed Research 15 (4) , 271◆282