## Species only recorded once at each height were:

O-1m above ground one plant only: Festuca rubra, Sagina procumbens, Dryopteris filix-mas, Arabidopsis thaliana.

1-2m above the ground one plant only: Lamium purpureum, Festuca rubra, Centranthus ruber, Taraxacum, Dryopteris filix-mas, Pseudofumaria lutea.

## omment

e usual "wall specialist" species, Asplenium ruta-muraria (Wall-rue), Asplenium chomanes (Maidenhair Spleenwort) and Cymbalaria muralis (Ivy-leaved adflax) were the most frequent species, as in my earlier report. Also, as in earlier report, these species were considerably more frequent in the upper stre of the walls. An earlier study of individual plants suggested that individual ants of Asplenium trichomanes may have a limited lifespan, but appeared to onise readily. Possible reasons for this distribution include salt application to add and paths in winter and the frequent use of herbicides at the base of the wall.

ere are also other habitat differences between the upper and lower section the walls, including light exposure and water availability. The possible effect other factors such a wall cleaning by humans, competition by bryophytes d grazing by invertebrates is uncertain. This part of Dundee on the east coast Scotland experiences frequent sea-mists or haar, which may bring extra sisture to the walls and influence plant growth.

e number of plants of other species is small, so it is difficult to reach any neclusion about their distribution on walls. The majority of the *Cerastium* nts were on one wall. A similar study of mortared stone walls in some small ster Ross towns showed a similar trend for the Asplenium species but not *Cymbalaria* (Ballinger in preparation)

ese mortared stone town walls are an important habitat, especially for all ferns.

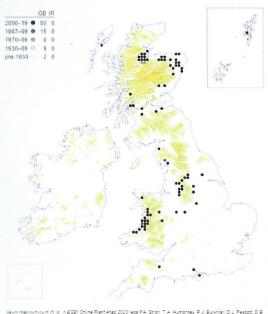
## ference

linger B. (2020) *50 Walls in Dundee* BSS News 115 24-27 an Ballinger **brian@garrickwood.org.uk** 



## Geum macrophyllum An alien that is spreading

Maria Chamberlain and Chris Jeffree describe how to distinguish this plant from *Geum urbanum* 



Geum macrophyllum Wild in BSBI Chline Flant Adad 2020 eds P.A. Strob, T. A. Humphrey, R. J. Burkmar, O.L. Pescott, D.B. Roy, & K. J. Walker https://orandadas2020.org/adas/20046Ph.k6s/1Accessed 28/06/20241

The large-leaved avens, Geum macrophyllum Willd., is larger showier and brighter than our native Geum urbanum. Its native range extends across North America, over the Bering Sea to north-eastern Russia (Gajewski, 1957).

The BSBI map shows that it is now gaining strongholds in several areas of the UK, although there appear to be none in the London area. In 2003 Stace recorded it in 17 vice-counties; in 2013 the BSBI Distribution Base showed records from 25; in 2019 it showed up in 80.

It was first reported in our home area of Stockbridge in 2010 (McKean and McHaffie, 2012). However, we first became aware

of it in our local park just this year, although we did do a thorough survey of the area during lockdown. Although, this species was not mentioned in Plant Life of Edinburgh and the Lothians (2002), it was reputedly already here in the Botanic Garden on Inverleith Row, introduced as a bona fide collection in 1967 from the University of British Columbia. There were then additional collections from Kyoto in 1980 and Hoyt Arboretum in 1988 (Hinchcliffe, pers. comm). Is it possible that these collections in the RBGE and/or the changing climate are responsible for its subsequent spread?

The differences between morphological characters of *Geum urbanum* and *Geum macrophyllum* are summarised by Chris Jeffree in the following table: