

Irish Lady's Tresses

(*Spiranthes romanzoffiana*)



Saving a very rare Plant of Lough Allen

What are they...

This is one of the rarest plants in Ireland and totally unknown in Asia or mainland Europe. It is spectacularly rare!

Lough Allen has maintained a small widely distributed population of this species for many years — exactly how long is not known!

For many years this plant's worst enemy was the weather and late Summer flooding. However it survived in different locations every year; mind you with only 1 found in 2009.

In 2013 specimens were widespread but very much affected by shoreline grazing. We know many people wish to protect this 'Jewel of Lough Allen' but are not sure how to do this. We aim here to provide information and seek your support in keeping what is a very important part of our Biodiversity.

(LoughAllenBasin.com)

How you can Help?

People can radically improve the quality of the environment around them by such simple actions as planting native trees or clearing invasive species.

Similarly we would hope farmers with land on the lake shore would be vigilant for the presence of these little white spike shaped flowers of *Spiranthes* coming up among low vegetation or on stony shores at the start of August. They are readily seen if the land is closely cropped.

And that is the best thing farmers can do to conserve this species — have the land well grazed for most of the year and then withdraw stock from the acre or two of land that has *Spiranthes* growing on it.

It may be possible to arrange a special case for funding through the new GLAS Agriculture initiative but this will take time and initially it may be necessary to incorporate conservation of this species into a cycle of moving stock which does not severely increase farming costs.

LoughAllenBasin.com is a locally based initiative which seeks to match the idea of conservation of Nature with the ambition to create both a more pleasant and diverse environment and a more contented one — with our improving quality of life drawing people to the area from other parts of Ireland and overseas. Tourists and Researchers will come to visit our region just to look in wonder at our rare plants, lakes and oceanic scenery. We know it... some are already coming in response to our work here.

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About the Plant.

Described and recorded by Russian Explorers in the Aleutian Islands (now Alaska) in the early part of the 19th. Century, *Spiranthes romanzoffiana* (with its glamorous Russian name) was first found in Ireland in Co. Cork in 1810 by a young Scottish Botanist working for the short-lived Cork Botanic Gardens.

It subsequently was discovered in other areas of Cork and Kerry moving up along the west coast and now having a strong base in the Mayo/Leitrim area. Its observation in Lough Allen is very recent. However earlier southern sites are now abandoned and the populations in Mayo and Leitrim are very crucial to the species' survival in Ireland. It is also found on the Western Isles of Scotland where some large numbers have been reported.

The species has been described as amphi-Atlantic, i.e. found on both margins of the North Atlantic. It never occurred in mainland Europe but is widespread in many northern and western parts of North America.

It belongs to a small group of orchids with one other member present in Ireland (the Autumn Lady's Tresses). The strange name derives from the twisted braided appearance of the spiral rows of flowers; '*Spiranthes*' meaning 'spiral flowers'.

Being on the margin of its range and with our present series of wet Summers, seed is often too late forming and may often not be set. But the pattern of occurrence on Lough Allen suggests germination from seeds that settled on the waterline many years before the emergence of the flowering stem. Individual plants may survive for many years with new 'lateral buds' forming as the old flower dies. These are present throughout the Winter and may contribute to producing a new flowering spike in the following Summer.



What needs to be done?

- Do not disturb the Plants. It is a protected species and should not be picked; every flower is important for the species survival. So far it has survived well but is now facing changing climate and environmental conditions.
- Most of the year it will fend for itself. Between mid July and mid October, while it is flowering and setting seed, it will benefit from animals being excluded from small areas of land on the east and north-east shores of Lough Allen.
- *Spiranthes* always occurs near the lake shore, often not in established fields. It is found in various different habitat types. Onshore Summer grazing can rapidly damage these plants as they emerge.
- We in LoughAllenBasin.com are very happy to record and report where it occurs and liaise directly with the landowner. Your help is essential in this conservation drive. Remember these are part of L. Allen's natural heritage!
- Tell us if you see 1 or more of these plants outside the main colonies on the south-east and north-east shores. Known sites are well recorded but it may appear in new areas on the west shore of L. Allen or, indeed, other lakes.
- Offers to set aside small parcels of land will be much appreciated and we can monitor, advise, and record the success of such work. Success can not be guaranteed as weather and plant conditions are unpredictable. Biodiversity protection is a feature of the new GLAS Agriculture funding initiative and might be called upon for support.

Is it worth it?

We believe so... Ireland is going through changes. **Natural History is part of our Heritage** and like language and music the different Landscape and Wildlife that we have here will be appreciated and sought out both by Irish people and by visitors from abroad. It is part of a sense of pride that we respect our countryside and seek to protect it from pollution or unseemly and heedless exploitation.

The collection of rare and distinctive plants and animals that Lough Allen possesses are **a valuable part of Ireland's Natural Heritage**. The Irish Lady's Tresses are a valuable part of that biodiversity. If we lose such things we lose part of our distinct and dramatic environment. Improving the way we manage all our resources, from water to fuel, may well mark the way our Country develops and recovers over the next few decades — hopefully with space for all and equal respect for farming and enterprise, tradition and progress, quality of life and environment.

The Irish Lady's Tresses are a tolerant species but one which may be susceptible to a warming and wetter climate. In a time of progressive change they can adapt and move elsewhere around a lake to a place where their seed can set and the mature plants can over-winter without being flooded. Their presence here indicates a different type of wilderness that caters for some very specialised plants not abundant elsewhere. The Lough Allen area also has the rare Blue-eyed Grass, Mudwort, and Thread Rush and abundant commoner axiophytes ('worthy' plants), as well as many species of birds and mammals breeding here (e.g. Daubenton's Bats) which are not so common elsewhere. Monitoring and protecting this diverse wildlife can be a convenient way of ensuring that this place remains the way many people fondly recall it — albeit without the much-lamented Corncrake!

The Lough Allen sites

Spiranthes occurs in Lough Allen in habitats varying from wet grassland to large boulder covered shores but always near water level and very close to the edge of the Lake. Examples of these habitats are shown here...



SITE 1



SITE 2



SITE 3



SITE 4



SITE 5

Site 1: Two early specimens budding in 2008 among big boulders on a stone covered offshore Gull island. Never been seen since.

Site 2: Important site near Drumshanbo with good numbers in three years. *Spiranthes* occurs here both on a grassy/muddy shore with 'bog oak' and a higher Rush covered old bog bank. Orchids have moved into the higher bank this year. This may remain free of flooding.

Site 3: Another 'grassy' site with Blue-eyed Grass and Marsh Pimpernel. Often 'safe' but affected by Summer shore grazing in 2013

Site 4: A narrow sloping stony shoreline of a small island. Centre of island is wooded and *Spiranthes* only occurred here in 2008.

Site 5: A steep rocky shore created by excavation with a rich flora including *Spiranthes* in 2011 - 2012

Lough Allen, Ireland and World distribution (2013)

The distribution of Irish Lady's Tresses in Lough Allen is shown on the right. There were only 3 locations where the Orchid was present this year, the most important one being the group of 23 down near Drumshanbo. This is a location where they were absent for a few years from 2009 to 2011 but have occurred in good numbers in all other years. The size of the circles does not represent the numbers present, rather a need to keep exact location of recent occurrences discreet.

Grey circles represent the many locations where *Spiranthes* flowered between 2008 and 2012 but not in 2013. As you can see there has been a big decrease in number of locations (as well as actual plant numbers) over these six years. Also, no specimens have flowered on the west side of the lake since 2008. The decline in Lough Allen's population has been tenfold in 6 years. Using some extrapolation to cover sites not recorded in 2008, there may have been **over 300 flowering spikes in 2008; there were 36 in 2013!**

In other parts of Ireland the main colonies have been at Lough Cullen in Mayo and Lough Corrib in Galway. They also occur around Lough Beg off Lough Neagh in Northern Ireland. Outside Ireland their only occurrence this side of the Atlantic is in Scotland, mainly on the Western Isles. A former population in Devon in England has not been seen for very many years.

Contact Details:

ORCHIDWATCH
David & Frances Farrell, Drumshanbo, Co. Leitrim
0863900731 / 0868162447 (Int: + 353868162447)

Website: **www.loughallenbasin.com**

eMail: **rhymindave@yahoo.ie**
Please Call, Text or eMail. If leaving a Message please state that your contact is in regard to 'OrchidWatch'

NB. This is a Promotional Document. Whilst being as accurate as we can make it, it is intended primarily to advise people, who may be able to help conserve this plant, of its uniqueness and of its value to this area.

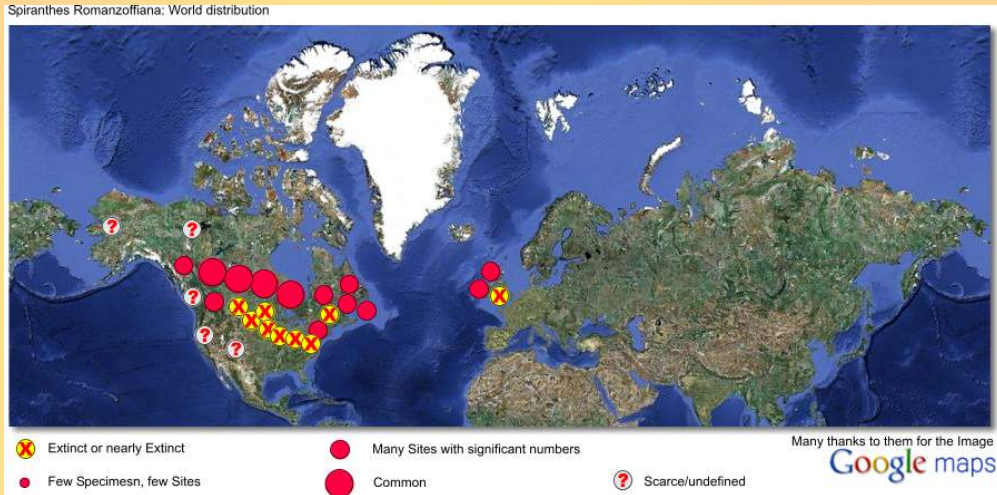
Many Thanks..



This specimen was found growing on its own near the Yellow River on a very exposed rocky shore with few other plants. At 8cms. it was one of the longest flower heads seen, though this is small by comparison with some North American specimens.

World distribution

World distribution of this interesting species is shown below. It is widespread across North America and found in much more diverse locations than in Ireland. The former English location is now gone. They are holding on in Ireland and apparently doing well in Scotland.



Spiranthes locations in Lough Allen 2008-2013

