

Luronium - 2011

2.1. Latinsk navn (Latin name)

Luronium natans (L.) Rafin.

2.2 Røddlistestatus (redlist status)

Sårbar. (Vulnerable)

2.3 Utbredelse (spreading/place)

Luronium natans is an European endemic. It occurs in Western and Central Europe, southern part of Scandinavia, in the range of the Atlantic and Subatlantic climate. The Oslo populations seems to be the northernmost and isolate population in the whole range.

2.4 Lokalteter i Norge (locations in Norway)

"Flytegro (*Luronium natans*) vurderes som sårbar (VU) fordi den bare er sikkert dokumentert fra fem små vatn innen to 4-km²-ruter, og fordi antall reproduktive individer fluktuerer sterkt. Flytegro er belagt i de offentlige herbariene fra Ak Oslo: Maridalen: Alnsjøen (1923-1978), Svartkulp (1948-2002), Breisjøen (1949-2002), Dausjøen (1995), og ei vik i Maridalsvatnet (1996-2009). Mye tyder på at den er kommet inn, trolig med fugl, til Alnsjøen tidlig på 1900-tallet og har spredt seg videre derfra. Forekomstene i Nordmarka synes stabile og er pr. idag ikke utsatt for negative påvirkningsfaktorer, men bestandene har store fluktuasjoner. I tillegg er arten rapportert fra Øf Fredrikstad: Roppestaddammen i 2009, men der som innplantet. En rapport fra Ak Oppegård i 1999 er ikke bekreftet, og en fra Vf Larvik bygde på feilbestemt materiale. Flytegro ser ut til å være lite påvirket av den tidligere drikkevannsreguleringen i Breisjøen, og den nåværende i Maridalsvannet. Arten omtales med kart hos Fægri & Danielsen (1996)." - Text from: Norsk_røddliste_for_arter_2010_pjuZH.pdf

2.4.1. Lokalteter i Oslo (locations in Oslo)

Oslo – 5 known locations (Alunsøen, Breisjøen, Dausjøen – confirmed by our researches in years 2008 – 2011. and Maridalvannet, Svartkulp – not confirmed).

2 locations confirmed in 2011

Location: 1. DAUSJØEN



Observations were made only from a shore, in eastern part of a lake! Plants could be observed only to the water depth of about 1.5 – 2 m and 3 – 5 m from the shoreline. *Luronium* can grow deeper- down to 3 m deep, but this area could not be examined from the shore (a boat is necessary).

Individuals: Very abundant, sometimes as many as 200 individuals / 1m². If we estimate: 10 individuals / m² and 2000 m of shoreline x 3 m wide belt of occurrence = 60 000 (for 200 individuals / 1m² = 1 200 000) individuals, or more.

Area: We estimate that *Luronium* is present on 60 – 70% of the lake shoreline. It grows more often on the Eastern side of the lake with the exception of a steep cliff in the southern part. It does not grow only in shallow, very muddy bays and in places where the water is immediately very deep. See the map.

Environment (habitat): Lake with stable water level. Plants prefer the depths between 10 – 100 cm. At that depth floating leaves can be visible. *Luronium* grows preferably on empty sandy bottom with a thin layer of organic sediment, but also together with: *Lobelia dortmanna*, *Juncus bulbosus*, *Equisetum limosum*, *Carex vesicaria*, *Lysimachia thyrsoiflora*, *Alisma plantago-aquatica* (rarely), *Nuphar luteum*

Condition: We have not seen floating leaves and flowers this year at a date of observation. Immersed leaf rosettes have been noticed in the same places and quantity as last years.

Care:

GPS-coordinates: 60° 0'31.70"N 10°47'23.08"E

[Luronium-Dausjoen1.kmz](#)

Date of watch: 30.07.2011

Owner:

Photos: R. Gramsz

Observer: R. Gramsz, J. Potocka.

Phot.1. Part of a shoreline with *Luronium* . Without floating leaves this year. 30.07.2011



Phot.2. Immersed leaf rosettes have been noticed in the same places and quantity as last years. 30.07.2011



BREISJØEN , ALUNSJØEN



Location: 2. BREISJØEN

Observations were made only from the shore!

Individuals: Abundant

Area: *Luronium* is present on ca 50% of the lake shoreline. Does not grow only in shallow, very muddy bays and where the water is immediately very deep. Also there is lack of *Luronium* close to the dam in Eastern part of a lake. See map.

Environment (habitat): This lake has changeable water level. Plants grow both on the expose shore and emerge in water. The highest concentration is observed along water depth of about 1m below maximum. *Luronium* grows preferably on empty sandy bottom, but also together with: *Lobelia dortmanna*, *Juncus bulbosus*, *Ranunculus reptans*, *Isoëtes echinospora* (?), *Equisetum limosum*, *Carex vesicaria*, *Lysimachia thyrsoiflora*.

Condition: Two forms of *Luronium* were found: 1. water form (with floating leaves and immersed leaf rosettes), 2. vegetative, immersed form (without floating leaves, only with immersed leaf rosettes). Water-terrestrial form (only with floating, leathery leaves) has not been found this year as the water level was at maximum at a date of observation. Floating leaves and flowers were on their way to surface (see photos).

Care: !!! – It will be very interesting to know (if it exists – data from limnigraph) the record of water level changes during as many years as possible.

GPS-Coordinates: 59°58'47.17"N 10°51'38.11"E

[Luronium-Breisjoen2.kmz](#)

(See the map. Map datum (Kartdatum): WGS 84; Position format (Posisjonsformat): UTM UPS) GPS 1: 0603737/ 6650352; GPS 2: 0603700/ 6650374; GPS 3: 0603661/ 6650387; GPS 4: 0603616/ 6650450; GPS 5: 0603672/ 6650527; GPS 6: 0603661/ 6650635

Date of watch: 30.07.2011

Owner:

Photos: R. Gramsz

Observer: R. Gramsz, J. Potocka

Phot.1. Maximum water level in lake. Floating leaves under water surface. 30.07.2011



Location: ~~3. ALUNSJÖEN~~

Individuals: Not found

Area: 2 places in small bays in Eastern and Southern part of a lake.

Environment (habitat): This lake is with changeable water level. Plants grows in a very shallow, both standing and flowing water in places where flow in streams forms pools still full of water. During maximum water level in the lake this places may be emerged in water but usually this water level is much lower.

At a day of observation the lake water level was at maximum. That means, it was 1 – 2 m of water over usually dry bottom of a bays were *Luronium* plants has been recently found.

With other plants:

Site 1. in water- *Alisma plantago-aquatica*, *Glyceria fluitans*, *Hippuris vulgaris*. On shore- *Carex lasiocarpa* (dominant), *Carex stellulata*, *Carex rostrata*, *Carex vesicaria*, *Comarum palustre*, *Epilobium palustre*, *Equisetum fluviatile*, *Galium palustre*, *Juncus bufonius*, *Lysimachia thyrsiflora*, *Menyanthes trifoliata*, *Peucedanum palustre*, *Polygonum minor*, *Ranunculus reptans*, *Rorippa palustris* cfr., *Sphagnum squarrosum*, *Veronica scutellata*

Site 2. in water- *Alisma plantago-aquatica*, *Alopecurus aequalis*, *Glyceria fluitans*, *Juncus bufonius*, *Rorippa palustris* cfr.,

Condition: In so high level of water it was not possible to find *Luronium* but we hope that it still subsist in those places.

Care: !!! – It will be very interesting to know (if it exists – data from limnigraph) the record of water level changes during as many years as possible.

GPS-coordinates: 59°57'57.94"N 10°51'4.54"E

[Luronium-Alunsjoen3.kmz](#)

Site 1. 59°57'50.45"N 10°51'18.85"E

Site 2. 59°57'41.56"N 10°51'5.12"E

Date of watch: 30.07.2011

Owner:

Photos: R. Gramsz

Observer: R. Gramsz, J. Potocka