

Clearwater Resource Council  
Summary of 2021 Aquatic Plant Surveys

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Clearwater Resource Council conducted aquatic and shoreline plant surveys on Seeley Lake, Salmon Lake, Lake Placid, Big Sky Lake, Lake Inez and Lake Alva from July 28 to August 13, 2021. A modified thatch rake was used to collect plant samples. Visual observations were recorded to augment rake throws. Mechanical surveys were concentrated at public access points, bays and inlets with visual surveys conducted traversing survey points. Invasive waterlilies were detected at all lakes with the exception of Lake Alva and Big Sky Lake. No other invasive plants were detected.

Dates and locations of surveys:

Lake Alva: July 29, 2021

Seeley Lake: July 30, 2021

Placid Lake: July 30 and August 13, 2021

Lake Inez: August 5, 2021

Big Sky Lake: August 6, 2021

Salmon Lake: August 10, 2021

Placid Lake (cont.): August 13, 2021

#### Lake Alva

Surveyors: H. Sedivy and H. Brown (CRC Staff)

One to three rake throws were completed at 21 sites on Lake Alva. A total of twelve plant species were observed (see table 1).

#### Seeley Lake

Surveyors: H. Sedivy, A. Dixon (CRC staff). J Wallenburn (volunteer)

One to four rake throws were completed at 27 sites on Seeley Lake, with visual observation made between throws. A total of thirteen plant species were observed.

#### Placid Lake

Surveyors: H.Sedivy, C. Miske (CRC staff). T. Joehler (volunteer)

Volunteer availability and watercraft maintenance issues limited the points taken on Lake Placid. One to three rake throws were completed over two days at 21 sites. A total of nineteen plant species were observed.

### Lake Inez

Surveyors: H. Sedivy (CRC Staff). Jennifer and Brad Elison (volunteers)

Volunteers had both completed Master Naturalist classes and were eager to learn about plant communities on Lake Inez. This was the only lake survey conducted from non-motorized watercraft. One to three rake throws were completed at fifteen points/areas with thorough visual surveys between points. Seventeen aquatic plant species were observed. Volunteers helped eradicate a very newly established small fragrant waterlily patch and mentioned that children of neighbors have been picking and relocating lily plants. The Clearwater Resource Council discussed this, and other AIS issues, with homeowners at the Lake Inez annual HOA meeting. The HOA decided to promote a lake-wide lily removal effort starting in 2022.



Photo: A sample of suspected western watermilfoil was collected from Lake Inez for analysis by the Flathead Lake Biological Station per request.

### Big Sky Lake

Surveyors: H. Sedivy (CRC staff). J. Harrits (volunteer)

One to three rake throws were completed at sixteen points/areas with visual surveys between points. Big Sky Lake is a small lake with no public boat launch. Only eight species of aquatic plants were observed, compared to twelve to nineteen observed at the other lakes. White-stem and Richardson's pondweed made up about 75% of aquatic plant abundance.

### Salmon Lake

Surveyors: H. Sedivy (CRC staff). J Wallenburn (volunteer)

One to four rake throws were completed at thirty points/areas with visual surveys between points. A total of eighteen species of aquatic plants were observed. Joann Wallenburn noted that water horsetail has become a nuisance in parts of the lake, affecting the substrate and shoreline.

## Aquatic Plant Survey table

Lake	Date	AIS Present	Sample Sent	Species present in order of abundance
Lake Alva	7/28/2021	No	No	PTMRI/PR, MYPSI, ELOCA, PTMIL, PTMZO, NUPPO, SLOAQ, PTMPE, CHARA, NAIFL, HPPVU, SCHAC
Seeley Lake	7/30/2021	NYMOR	No	PTMRO, NYMOR, MYPSI, PTMRI/PR, MEGBE, ELOCA, BLA, PTMAM, PTMZO, BRASC, PTMNO, VAIAM, CHARA
Placid Lake	7/30 and 8/13 2021	NYMOR	No	PTMRI/PR, PTMRO, MEGBE, ELOCA, PTMAM, MYPSI, MYMOR, CHARA, NITEL, BLA, PTMGR, RANTR, PTMZO, NAIFL, CEYDE, MYPHI, QUI, PTMFO, SAGCU, HPPVU
Lake Inez	8/5/2021	NYMOR	Yes	PTMRO, MYPSI, PTMAM, ELOCA, PTMZO, PTMRI/PR, NYMOR, MEGBE, RANTR, PTMNO, CEYDE, NAIFL, MYPHI, BLA, CHARA, PTMPE, NUPPO
Big Sky Lake	8/5/2021	No	No	PTMRI/PR, MYPSI, PTMZO, CHARA, CEYDE, RANTR, PTMAM, SCOAQ
Salmon Lake	8/10/2021	NYMOR	No	PTMRI/PR, NYMOR, PTMRO, EQUFL, ELOCA, MYPSI, MEGBE, RANTR, PTMZO, PTMNO, SAGCU, MENYA, POLAM, CHARA, BLA, SCHAC, CEYDE, VAIAM

## Observed aquatic plants and Bayer codes

Common name	Scientific name	Bayer code
arrowhead, wedgeleaf	<i>Sagittaria cuneata</i>	SAGCU
bladderwort spp.		BW
bulrush, hardstem	<i>Schoenoplectus acutus</i>	SCHAC
Bog buckbean	<i>Menyanthes trifoliata</i>	MENYA
celery, water (eelgrass)	<i>Vallisneria americana</i>	VAIAM
chara	<i>Chara</i> spp.	CHARA
coontail	<i>Ceratophyllum demersum</i>	CEYDE
Elodea, common	<i>Elodea canadensis</i>	ELOCA
Horsetail, water	<i>Equisetum fluviatile</i>	EQUFL
marestalk, common	<i>Hippuris vulgaris</i>	HPPVU
moss, aquatic	<i>Scouleria aquatica</i>	SCOAQ

naiad, slender	<i>Najas flexilis</i>	NAIFL
Nitella	<i>Nitella</i> spp.	NITEL
Pond-lily, yellow	<i>Nuphar polysepala</i>	NUPPO
pondweed, American	<i>Potamogeton nodosus</i>	PTMNO
Pondweed, big leaf	<i>Potamogeton ampifolius</i>	PTMAM
Pondweed, fern leaf	<i>Potamogeton robbinsii</i>	PTMRO
pondweed, flatstem	<i>Potamogeton zosteriformis</i>	PTMZO
pondweed, floatingleaf	<i>Potamogeton natans</i>	PTMNA
pondweed, Illinois	<i>Potamogeton illinoensis</i>	PTMIL
pondweed, leafy	<i>Potamogeton foliosus</i>	PTMFO
pondweed, Richardason's	<i>Potamogeton richardsonii</i>	PTMRI
pondweed, sago	<i>Potamogeton (Stuckenia) pectinatus</i>	PTMPE
pondweed, variableleaf	<i>Potamogeton gramineus</i>	PTMGR
pondweed, whitestem	<i>Potamogeton praelongus</i>	PTMPR
smartweed, water	<i>Polygonum amphibium</i>	POLAM
waterbuttercup, white	<i>Ranunculus aquatilis</i>	RANTR
waterlilly, fragrant	<i>Nymphaea odorata</i>	NYMOR
watermilfoil, northern	<i>Myriophyllum sibiricum</i>	MYPSI
watermilfoil, western	<i>Myriophyllum hippuroides</i>	MYPHI
Watershield	<i>Brasenia schreberi</i>	BRASC
marigold, water	<i>Megalodonta beckii</i>	MEGBE
Quilwort		QUI