Calypso Companion

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The Calypso Chapter of the Idaho Native Plant Society meets on the first Wednesday of March, April, May and October. The Chapter schedules field trips during the spring, summer, and fall. The Calypso Chapter of the INPS was founded in 1991. We continue our efforts in promoting interest in native plants and native plant communities, collecting and sharing information on all phases of botany concerning this flora. Membership is open to all interested in the native plant community.

## Next Meeting

The next meeting is Wednesday March 6, 2019 at 7:00 p.m. at the Idaho Fish and
Game Building at 2885 W Kathleen, Coeur d'Alene, directly across from US Forest Service Nursery on the west end of Kathleen Avenue near Atlas Road.

## DUES ARE DUE for 2019.

## Agenda

Business meeting
Treasurer's report
Old business
New business
Upcoming Calypso Chapter Events: Wednesday, March 6, Calypso Chapter Meeting 7 PM, Idaho Fish and Game Office, 2885 W Kathleen Ave, Coeur d'Alene. Presentation: by Derek Antonelli

## Meeting Notes of October 3, 2018

Derek opened the 7 PM meeting at The CDA Fish and Game Office. Dues for 2019 are due as of January 1, 2019. Derek reminded to the group there would be an arrow Leaf seed collection project on Saturday October $13^{\text {th }}$ at MacArthur Lake. Waders or boats will be needed. Laura gave a treasurers report. Our Club balance is $\$ 1151.38$ as of August 11, 2018. Savings balance is $\$ 348.50$. She also announced the new edition of Flora of the Pacific Northwest is out and may be purchased online.
Derek invited members to suggest idea for future programs. Fish and Game biologist Lynn Kinter has provided information we can use in a future meeting. Future meetings may be held at the Fairgrounds. This months Featured Plant will be discussed later in the presentation.
Program: "Ferns and Allies of North Idaho" by Derek Antonelli. Ferns are green flowerless plants with divided leaves that tend to grow in damp, shady areas. There are 60 species of ferns in Idaho out of eleven thousand worldwide. They have existed for millions of years and are older than most land animals and far older than dinosaurs! Derek had many examples of pressed ferns from his collection on display for the group as well as digital examples. The fern body consists of 3 major parts - the rhizome, the fronds and the sporangia. Ferns reproduce by spores and it is possible to see them become many feet tall (in Florida).
Structure:

- Fronds are the basic leaves and come from underground rhizomes to form the Pinnae or leaflets. They may be arranged alternately or in opposite pairs along the midrib. A young fern frond is produced from the rhizome. Rhizomes often grow underground. The rhizome produces roots and new fronds. If the frond is once divided, then it is 'pinnate'. More commonly fronds are divided into secondary pinnae and are 'bipinnate', or into tertiary pinnae and are 'tripinnate'.

Leaf Divisions of Ferns


Simple


Pinnatifid


Pinnate


Pinnate-
Pinnatifid


2-Pinnate


2-PinnatePinnatifid

An erect rhizome is a solid mass that gives rise to a tuft of fronds.
A laterally growing rhizome creeps along or under the ground. It may even climb up a tree. Hound's tongue and thread ferns are examples of a fern with a creeping rhizome. A vertical rhizome can grow into a short or a tall trunk.


Anatomy of a fern

The spores grow inside casings called sporangia.
These are found on the underside of fronds. Not every frond has sporangia underneath it. Fronds that have sporangia are called fertile fronds. Ferns may have fronds that are dimorphic, meaning they have both sterile and fertile fronds. An example of a dimorphic fern is Deer Fern Blechnum spicant.

In the vast majority of ferns, the sporangia are found in clusters (called sori) and may be covered by a thin indusium. These are the brown, black or orange patches that you see on the underside of fronds. When the sporangia shrink they break open and release


Deer Fern with fertile and sterile fronds the spores. Sori come in many shapes and are sometimes lacking.


Sori with indusium covering


Polypodia has cup shaped indusium

Featured Plant for March- Carolina bugbane, Tassel-rue, False bugbane-Trautvetteria caroliniensis, Family Ranunculaceae.

General: Perennial woodland forb/herb.
Leaves: both caudate and basal, with up to 12 " across, deeply lobed and deeply serrated green leaves.

Ecology: grow in moist to wet, acidic soil, in part to full shade.
Notes: Carolina bugbane is poisonous. The stems are terminally divided, and bear clusters of white, fragrant flowers. They do not have petals, but their dense, extended white stamens form showy, white orbs. Trautvetteria caroliniensis is the only species of the genus.


