

Dryopteris intermedia v.s. Campyloptera

This text written 11/2/14 from memory

Discovery made and 45-year mystery solved at Bog # 343 in Balsam Lake Mtn West Schoolhouse Mtn. Col on 10/31/14 about NOON.

There are two species.

They do not hybridize because D. intermedia is 2n and Campyloptera is 4n (check this). Offspring at 3n would be sterile because meiosis cannot occur with an odd # of chromosomes. Often they grow side-by-side.

The 45-year puzzle has been caused by the great variability within each species: D. intermedia fronds vary greatly in size from 10" to 32".

D. campyloptera fronds senesce at different times and at different rates from one patch a plant to the next in the autumn.

<u>D. intermedia</u>	feature	<u>D. campyloptera</u>
great	shade tolerance	moderate
from <1500ft to almost 3700' on Balsam Lake Mtn.	elevation range (check field notes for more mtn. elevations)	>3000' on Balsam Lake Mtn beginning on the 1st PB boulder field. Lowest elev. 2784' on Mary Smith
From <10" in dense hemlock shade to >32" in partial sunlight as at 2810	frond length ← calculate medians →	15" to 46" in most plants
evergreen	deciduousness *what previously were thought to be hybrids are <u>D. campyloptera</u> that are still partly green later into the fall.	deciduous, but very variable in time & duration of senescence* Some turning purple on Truga top on 8/7/14 (see p. 166-32) and others still with some green on 10/31/14 on Balsam Lake Mtn. In between are various shades of purple & brown, and various degrees of wilting & snapping flat on ground.
Difficult to snap a rachis	fragility	Rachises snap early when ^{frozen} frond is pulled up from flat on ground.