

PLANT TAXONOMY

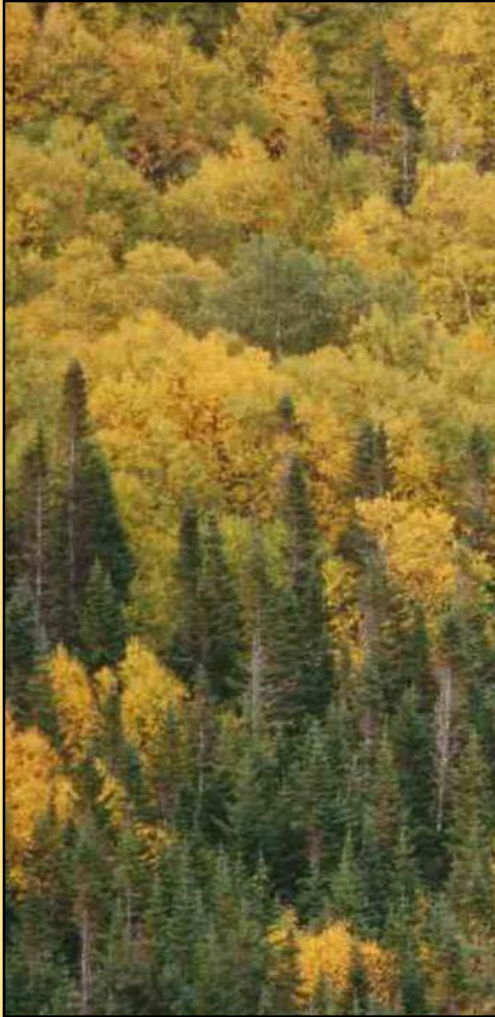
Where do we grow
from here?

Marilyn Anions
and
Bruce Young
NatureServe Northeast
Conference April 2009



Drosera rotundifolia John Maunder

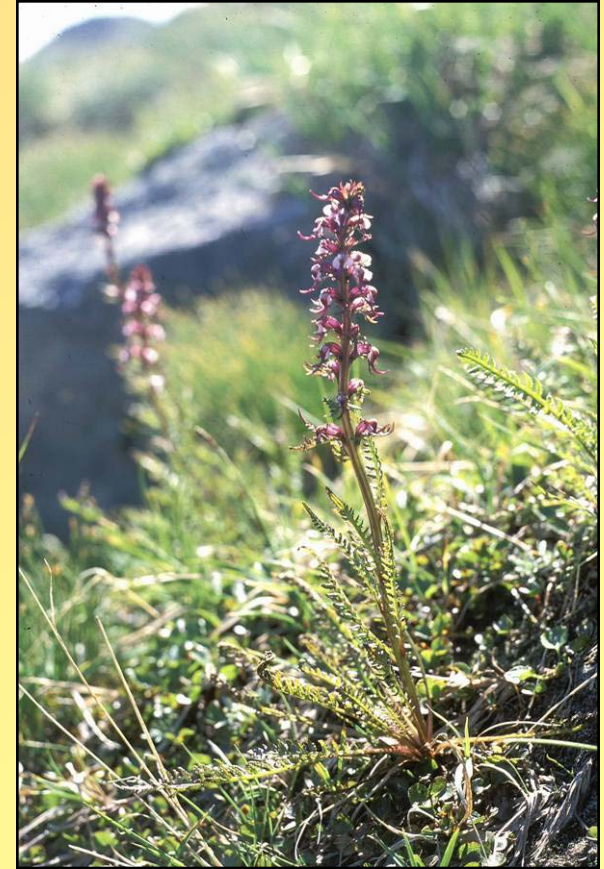
OVERVIEW



- Many exciting developments in plant taxonomy in North America!
- What are some of the leading and interesting taxonomic projects?
- What might be NatureServe's strategy?
- We need your viewpoints and participation!

THE NORTH!

- North America NatureServe Network completion (NT & NU)
- Pan Arctic Floral Project
 - taxonomic checklist with distribution for Alaska, Canada, Greenland, Iceland, Russia, Norway plus other areas
 - taxonomic recognition of taxa as the same species across boundaries
 - checklist available later this year



Pedicularis groenlandica Marilyn Anions



Conservation of Arctic Flora and Fauna



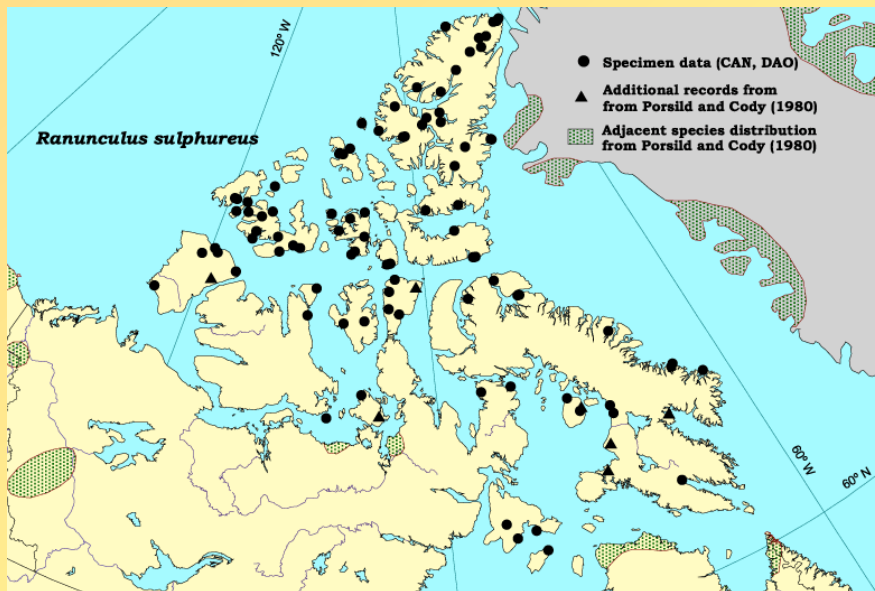
- Goals of monitoring, conservation and protection of arctic biodiversity especially with the involvement of indigenous peoples
- Currently conducting an Arctic Biodiversity Assessment
- Hosts Arctic Portal Interactive Data Map <http://portal.inter-map.com/>



Canadian Arctic Research

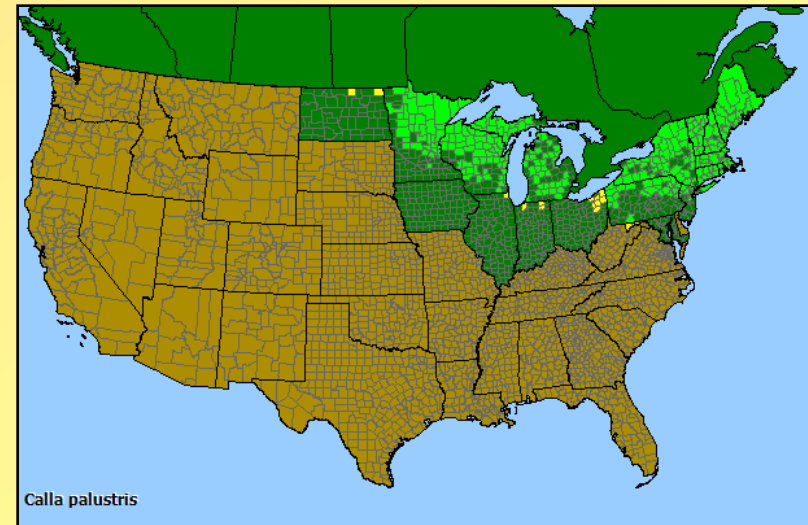
Flora of the Canadian Arctic Archipelago

- Update and finished product from website
- http://www.mun.ca/biology/delta/arcticf/_ca/index.htm
- Keys, thousands of images, maps, indigenous knowledge, notes on circumpolar distribution
- Ongoing research in Canada in conjunction with other northern countries



The Biota of North America Program (BONAP)

- vascular plants of North America 1994 Synthesis updated in 1999
- next version planned for release later in 2009
- includes county level information throughout the U.S. but needs county level information for Canada (another 2-5 years)
- 250,000 photographs and/or illustrations
- Reporting on various statuses by colour code per county level:
 - native / exotic / noxious
 - presence / absence
 - common/ rare / extirpated / extinct
- also working on vertebrate animal database



BONAP



FLORA OF NORTH AMERICA



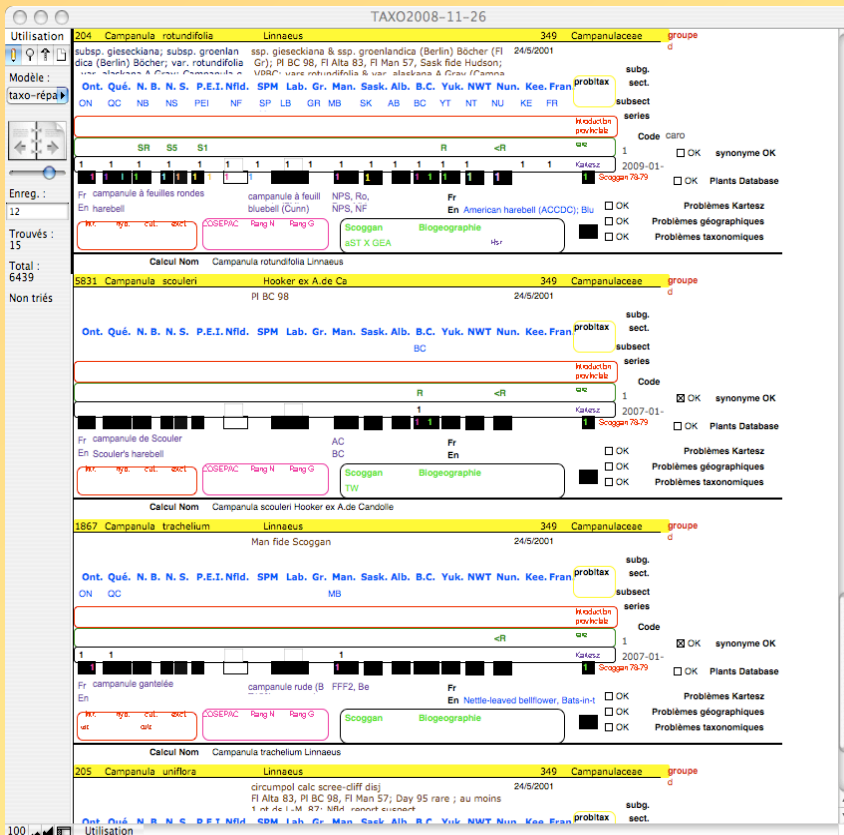
- comprehensive treatment for North America north of Mexico
- completed by experts specific to taxonomic groups based on specimen verification and research (vascular plants and bryophytes)
- 30 taxonomic volumes planned (1 is an introduction & 30 is a index and bibliography); currently 12 volumes available on vascular plants and 1 of 3 volumes on bryophytes
- free internet access with future changes possible online
- Date for completion is aimed for 2012



Iris setosa John Maunder

VASCAN : database of VAScular plants of CANada

- FileMaker Pro
- 6439 entries
 - native
 - exotic
 - hybrid
 - excluded
- taxonomy and provincial distributions
- free internet access later this year
- VASCAN in partnership with USDA PLANTS



USDA PLANTS

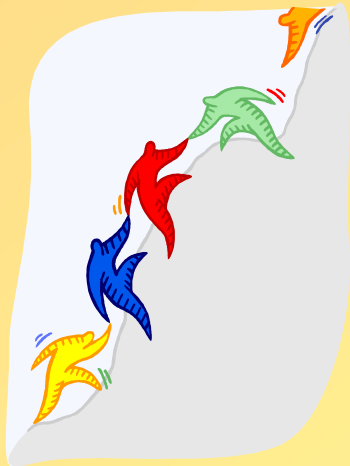


- Standard for U.S. Govt. Includes vascular plant distribution at state and province level, and by U.S. county, and non-vascular and lichen checklists for North America (n of MX)
- Experts, primarily derived from the FNA network, will update taxonomic treatments and be cited as the last updater in the online metadata
- Will have concept identifiers and ability to track changes
- Distribution references will have full specimen information or citation
- Gymnosperms being updated by the NSF Assembling the Tree of Life (AToL) group
- Draft Gymnosperms of U.S. key available online but not yet reflected in Plant Profiles

Background and a Strategy to Move Forward



- NatureServe goal for FY10 “Update strategically important components of NatureServe’s datasets to current North American plant taxonomy”
- What is the current status?
 - mix of Kartesz 1994 and 1999 and thousands of nonstandards
- What are the opportunities?
 - BONAP, FNA, USDA PLANTS
- What will be our approach?
 - taxonomic approach similar to zoology without a sole source for all vascular plants
 - different standards for specific taxonomic groups
 - consultation and consensus with network botanists
 - advance notice with updates



We need your viewpoints and participation!



Mealy Mountains, Labrador; Marilyn Anions