

# Borealis

the newsletter of the



PO Box 141613, Anchorage, Alaska

April/May 2018

## Join us at our Next Meetings!

### Monday, April 2, 7:00 p.m

Main Topic: "A Brief Visit to Kamchatka with Steller, Hulten, and 3 crazed fishermen"

Speaker: **Carolyn Parker**

Roseacea Family: **Potentilla**

Presenter: **Forrest Baldwin**

### Monday, May 7, 7:00 p.m

Main Topic: "**Non-vascular vegetation research across Alaska's National Parks**"

Speaker: **James Walton**

Mini-Botany: "Why aren't cottonwood trees found in mature forests?"

Speaker: **Charlene Johnson**

Roseaceae Family Plant: **Malus**

Presenter: **Marilyn Barker**

For the latest information about ANPS events and field trips, go to [www.aknps.org/](http://www.aknps.org/)

"Like" Us on Facebook!

## THE BIG PICTURE

## WEED WARRIORS NEED YOUR HELP

ANPS has led a decade-long project to remove the invasive weed *Tragopogon dubius* (western or yellow salsify) from the few locations that this plant grows in Turnagain Arm. While our local invasive plant control group will be taking over project management this year, ANPS volunteers are still needed to help with volunteer hand pulling efforts in order to see this effort to completion.



ANPS members meet every other Tuesday evening in the spring to search for and remove *Tragopogon* from four locations between McHugh Creek and Bird Creek, in order to find plants before they go to seed.

Volunteers should be prepared to walk or scramble rough terrain in and near active transportation corridors (the shoulder of the Seward Highway, steep adjoining hillsides, etc.) for up to two and half hours at a time. Dogs and children should remain home. Helpful items include gloves, a sturdy dandelion digger or similar device adequate to loosen rocky compacted soil with, a medium or large sized trash bag to put plants into, and a bright, visible jacket or hat.

Rewards include the amazing views over the Arm during quiet summer weekend evenings and the potential for complete eradication of an invasive species from our state by volunteer efforts only. We'll see you there!



For more information about the ranking of western salsify as an invasive plant in Alaska, see [http://accs.uaa.alaska.edu/files/invasive-species/Tragopogon\\_dubius\\_RANK\\_TRDU.pdf](http://accs.uaa.alaska.edu/files/invasive-species/Tragopogon_dubius_RANK_TRDU.pdf)

Learn more about *Tragopogon dubius* on page 3 of this newsletter.

# New Flora Of Alaska Checklist



In January 2018, the Flora of Alaska Website: <https://floraofalaska.org> published a new comprehensive synonymized checklist of vascular and non-vascular plants and fruticose lichens of Alaska.

Both native and non-native vascular plants are included within the vascular flora. The Checklist contains 2,446 accepted names of species and infraspecies that are known to occur in Alaska. The flora consists of 1,950 native taxa and 496 non-native taxa. Synonyms and misapplied names are searchable using the main search block above the table. The checklist has been developed from lists of plants occurring in Alaska from [Checklist of the Panarctic Flora, University of Alaska Museum Herbarium \(ALA\)](#), [University of Alaska Anchorage Herbarium \(UAAH\)](#), and [USDA Plants Database](#). The checklist includes synonyms and names that have been misapplied for species in Alaska. Accepted nomenclature was inherited from the following persons or sources in order of priority:

1. Individual taxonomic specialists
2. [Pan-Arctic Flora Checklist](#)
3. Dave Murray, Ph.D. (Curator Emeritus of ALA)
4. [Flora of North America](#)
5. [Integrated Taxonomic Information System \(ITIS\)](#)
6. [The Plant List](#)
7. [USDA Plants Database](#)

Carlson, M.L., J.R. Fulkerson, B.J. Heitz, and T. Nawrocki (eds.). 2018. Vascular Flora and Non-vascular Checklist of Alaska. University of Alaska Anchorage. Anchorage, Alaska. Available online: <https://floraofalaska.org>

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## ALASKA NATIVE PLANT SOCIETY

### State and Anchorage Chapter Officers

President	Beth Baker
Vice President	Dennis Ronsse
Secretary	Ginger Hudson
Treasurer	Mary Stella

### Anchorage Chapter Program Coordinators

Membership	Mary Stella
Plant Family	Dennis Ronsse
Mini-Botany	Marilyn Barker
Field Trips	Dennis Ronsse

### Newsletter ("Borealis")

Editor: Ginny Moore

*Borealis* is published bi-monthly, fall through spring. Articles may be sent to Ginny Moore, , Anchorage, AK 99516. Phone or FAX: , E-mail: [elfinwood@gmail.com](mailto:elfinwood@gmail.com)



### IT WORKS!

**IN THE LAST 3 MONTHS ALONE, ANPS HAS EARNED OVER \$70 FROM JUST 14 MEMBERS SHOPPING AT FREDDY'S!**

**WON'T YOU JOIN US?**

**IT DOESN'T AFFECT YOUR OWN REWARDS POINTS.**

Fred Meyer is donating \$2.5 million per year to non-profits in Alaska, Idaho, Oregon and Washington, based on where their customers tell them to give. Here's how the program works:

- Sign up for the Community Rewards program by linking your Fred Meyer Rewards Card to (non-profit) at [www.fredmeyer.com/communityrewards](http://www.fredmeyer.com/communityrewards). You can search for us by our name or by our non-profit number **90390**.
- Then, every time you shop and use your Rewards Card, you are helping (non-profit) earn a donation!
- **You still earn your Rewards Points, Fuel Points, and Rebates, just as you do today.**
- If you do not have a Rewards Card, they are available at the Customer Service desk of any Fred Meyer store.
- For more information, please visit

[www.fredmeyer.com/communityrewards](http://www.fredmeyer.com/communityrewards).

# Yellow Salsify

BOTANY IN A MINUTE  
(OR 5)

## *Tragopogon dubius* Scop.

Synonyms: *Tragopogon dubius* Scop. ssp. *major* (Jacq.) Voll., *Tragopogon major* Jacq.

Other common name: common salsify, goat's beard, goatsbeard, meadow goat's beard, salsifis majeur, salsify, western goat's beard, western salsify, wild oysterplant, yellow goat's beard

Family: Asteraceae

**Invasiveness Rank: 50** The invasiveness rank is calculated based on a species' ecological impacts, biological attributes, distribution, and response to control measures. The ranks are scaled from 0 to 100, with 0 representing a plant that poses no threat to native ecosystems and 100 representing a plant that poses a major threat to native ecosystems.

### Description

Yellow salsify is biennial plant that grows 30 ½ to 91 cm tall from a large taproot. All parts of the plant contain a milky, white juice. Leaves are up to 30 ½ cm long, clasping, alternate, narrow, grass-like, somewhat fleshy, hairless, and light-green to blue-green. Flower heads are 2 ½ to 6 ¼ cm across with yellow ray flowers. Flower heads form at the end of long, hollow peduncles. There are 10 to 14 bracts subtending each head. Bracts are 2 ½ to 5 cm long and extend beyond the ray flowers. Leaves from the previous year are often found at the base of the plant. The fruiting head of yellow salsify is globe-shaped, 6 ¼ to 10 cm in diameter, and composed of pappus-bearing seeds (Royer and Dickinson 1999, Whitson et al. 2000).



*Tragopogon dubius* Scop. Photo by R. Old

*Similar species:* Yellow salsify seedlings can be mistaken for small grass plants. Meadow salsify (*Tragopogon pratensis*) also has yellow flowers and could be confused

with yellow salsify. It grows throughout Canada. Unlike yellow salsify, meadow salsify does not have swollen stems below the flower heads, and each of its flowers has only 8 or 9 floral bracts (Royer and Dickinson 1999). No other tall, yellow-flowered Asteraceae species in Alaska have milky juice and long, narrow bracts.



Flower head on *Tragopogon dubius* Scop. Photo by M. Harte

### Ecological Impact

*Impact on community composition, structure, and ecosystem processes:* Yellow salsify establishes in sparse, herbaceous communities, where it creates a new layer. High densities of yellow salsify are likely to inhibit the growth and recruitment of native forbs and grasses (M. Shephard – pers. com.). This species is unpalatable to grazing animals. It attracts many types of pollinating insects (M. L. Carlson – pers. obs.).



*Impact on ecosystem processes:* The impacts of yellow salsify on ecosystem processes are unknown.

### Biology and Invasive Potential

*Reproductive potential:* Yellow salsify reproduces by seeds only. Each plant is capable of producing up to 500 seeds (Royer and Dickinson 1999).

*Role of disturbance in establishment:* Yellow salsify grows in disturbed sites. It can establish in intact to moderately grazed prairies in Oregon. Steep slopes are also susceptible to invasion (M.L. Carlson – pers. obs.).

*Potential for long-distance dispersal:* Seeds are easily and widely dispersed by wind because each seed has a feathery, webbed pappus (Royer and Dickinson 1999).

*Potential to be spread by human activity:* Yellow salsify is a potential contaminant in commercial seed (USDA, ARS 2004). It is known to contaminate seed mixes used for road construction.

*Germination requirements:* Seeds do not require cold-stratification to germinate (USDA 2002).

*Growth requirements:* Yellow salsify is adapted to all soil textures with pH levels from 6.5 to 7.5. It has low nutrient and moisture requirements. This species is shade intolerant, can withstand temperatures as low as -33°C, and requires 160 frost-free days for successful growth and reproduction (USDA 2002).

*Congeneric weeds:* Meadow salsify (*Tragopogon pratensis*) and common salsify (*T. porrifolius*) are known to occur as non-native weeds in North America (Stebbins 1993).

### References:

- AKEPIC database. Alaska Exotic Plant Information Clearinghouse Database. 2010. Available: <http://akweeds.uaa.alaska.edu/>
- ALA. University of Alaska Herbarium. Arctos online database [10 November 2004]. <http://arctos.database.museum/home.cfm>
- Carlson, M.L., Assistant Research Professor, Alaska Natural Heritage Program, University of Alaska Anchorage, 707 A Street, Anchorage, Alaska. Tel: (907) 257-2790 – Pers. obs.
- Invaders Database System. 2010. University of Montana. Missoula, MT. <http://invader.dbs.umt.edu/>
- ITIS. 2010. Integrated Taxonomic Information System. <http://www.itis.gov/>
- Lapina, I. botanist, Alaska Natural Heritage Program, University of Alaska Anchorage, 707 A Street, Anchorage, Alaska. Tel: (907) 257-2710 – Pers. obs.
- Royer, F., and R. Dickinson. 1999. Weeds of the Northern U.S. and Canada. The University of Alberta press. 434 pp.
- Rutledge, C.R., and T. McLendon. 1996. An Assessment of Exotic Plant Species of Rocky Mountain National Park. Department of Rangeland Ecosystem Science, Colorado State University. 97 pp. Northern Prairie Wildlife Research Center Home Page. <http://www.npwr.usgs.gov/resource/plants/explant/index.htm> (Version 15DEC98).
- Shephard, M., Vegetation Ecologist, USDA, Forest Service, Forest Health Protection, State and Private Forestry, 3301 C Street, Suite 202, Anchorage, Alaska 99503 Division. Tel: (907) 743-9454- Pers. Com.
- Snyder J.M. UAF Cooperative Extension Service, 2221 E. Northern Lights Blvd. #118 Anchorage, AK 99508-4143 tel: (907) 786-6310 alt.tel: (907) 743-9448 – Pers. com.
- Stebbins, L. G. 1993. *Tragopogon*: Goat's Beard. In Hickman, J. C. (ed.) The Jepson Manual: Higher Plants of California. pp. 354-355.
- USDA (United States Department of Agriculture), NRCS (Natural Resource Conservation Service). 2002. The PLANTS Database, Version 3.5 (<http://plants.usda.gov>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.
- USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. URL: <http://www.ars-grin.gov/var/apache/cgi-bin/npgs/html/taxon.pl?300618> (7 October, 2004).
- Whitson, T. D., L. C. Burrill, S. A. Dewey, D. W. Cudney, B. E. Nelson, R. D. Lee, R. Parker. 2000. Weeds of the West. The Western Society of Weed Science in cooperation with the Western United States Land Grant Universities, Cooperative Extension Services. University of Wyoming. Laramie, Wyoming.

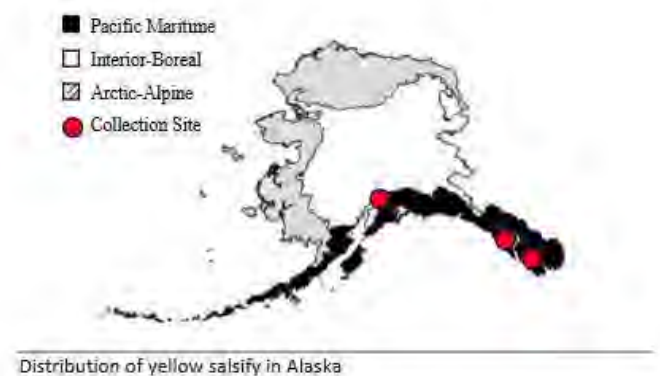
### Legal Listings

- Has not been declared noxious
- Listed noxious in Alaska
- Listed noxious by other states
- Federal noxious weed
- Listed noxious in Canada or other countries

### Distribution and Abundance

Yellow salsify is a common weed of cultivated crops, roadsides, and waste areas.

*Native and current distribution:* Yellow salsify is native to Eurasia. It is now established throughout much of temperate North America. In Alaska, this species has been documented from the Pacific Maritime and Interior-Boreal ecogeographic regions (ALA 2004, AKEPIC 2010).



## HARVESTING DEVIL'S CLUB

by "Alaska Beachcomber" Jo Wendel

Editor's Note: This is the introduction to an article you definitely need to see if you are considering harvesting and using Devil's club. It is used with permission of the author, Jo Wendel, who is a lifelong resident of Southeast Alaska.



With the warming soil and longer daylight of spring, small leaf buds tip the devil's club's wicked stalks. This plant is loved and hated at the same time.

Those spines are sharper than needles, and they break off in the skin. The painful stickers defy tweezers, but usually fester in a few days, and can be worked out at that time. The springy devil's club stalks often lay along the ground, seemingly in wait for me to step on one and have the working end snap up and then embed thorns in my leg. Jeans are not adequate chaps, but thick raingear is. I often wear leather gloves also, while hiking difficult

country, because devil's club generally presents itself as a convenient handhold when I am slipping down a steep hillside.

Devil's club is well loved as a plant of beauty and medicine, though. With huge palmate leaves and showy red berries it is used as a decorative shrub in some Alaskan gardens. In the fall those big leaves turn yellow, and become a lovely sight in the forest understory.

Devil's club has been used as physical and spiritual medicine for longer than history records. It is used for minor complaints as well as serious illnesses\*, for good luck, and for magic. The methods for preparing this plant for use are varied, including tea, tincture, and salve, chewing the inner bark fresh or dried, burning it and using the ash, and more\*. Most sources recommend using the inner bark of the root, including the stems that lie along the ground and no longer have spines. I have had several Alaska Natives tell me that the medicine in the spiny stalk is just as good as the root\*. They wear heavy leather gloves to strip off the sharp spines and then process the stalk as they would the root.

The berries are poisonous to humans, but bears love them.

There are lots of ways to collect devil's club. Here's how I go about it. I look for stalks that are growing out of a recumbent stem; preferably one that is a few inches under the forest duff. Those old stalks have become a root and are usually long and fairly straight. I dig around the root and expose it for three or four feet, clipping off spiny branches with the loppers. I then cut both ends and pull or cut any small roots holding it in place.

Stalks that are cut off should be used or have the cut end tucked well into loosened soil and then tamped in. I have returned to places where I have harvested in the past and witnessed that the cuttings I planted are growing.

It is common to see a plant that has multiple stalks arcing out of one spot. I stay away from those for three reasons.

- The roots are usually twisted, difficult to dig out, short, and hard to work with.
- Far too much plant has to be destroyed for the amount of root gathered.
- Those bushes are often 'mother' plants.

I look around the periphery of a multi-stalked devil's club like this for small stalks shooting up out of an old branch or root. By digging at the base of one of those 'suckers' I can usually find a stout, shallow root that heads back toward the main plant. The 'sucker' is generally well rooted, so I take the root between that and the 'mother plant' so that both survive.

Please go to Alaska Beachcomber's blog for clear details and photos of what to do with the root once you've harvested it.

<http://www.alaskafloatsmyboat.com/beachcombing/2013/5/12/collecting-devils-club>.



**ALASKA NATIVE PLANT SOCIETY**  
**2018 Field Trip Planning Form**

Return to Dennis Ronsse by April 15 E-mail: [dennis.ronsse@gmail.com](mailto:dennis.ronsse@gmail.com)  
Please include all relevant information. Some fields may not apply.

Leader: \_\_\_\_\_

Telephone: \_\_\_\_\_ E-Mail \_\_\_\_\_

Field Trip To: \_\_\_\_\_

Date: \_\_\_\_\_ Day of Week: \_\_\_\_\_ Time Allotted: \_\_\_\_\_

Meeting Time: \_\_\_\_\_ Meeting Place: \_\_\_\_\_

Driving Distance/Car Pooling Info: \_\_\_\_\_

Level of Difficulty: \_\_\_\_\_ Minimum Age: \_\_\_\_\_

Description of Trip: \_\_\_\_\_

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Special Instructions: \_\_\_\_\_

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Reservations by (date): \_\_\_\_\_



## FROM OUR BOOKSHELVES

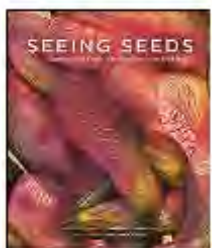


### **Seeing Trees: Discover the Extraordinary Secrets of Everyday Trees**

by Nancy Ross Hugo, Robert Llewellyn (Photographer)  
Timber Press 2011

Have you ever looked at a tree? That may sound like a silly question, but there is so much more to notice about a tree than first meets the eye. *Seeing Trees* celebrates seldom seen but easily observable tree traits and invites you to watch trees with the same care and sensitivity that birdwatchers watch birds. Many people, for example, are surprised to learn that oaks and maples have flowers, much less flowers that are astonishingly beautiful when viewed up close.

Focusing on widely grown trees, this captivating book describes the rewards of careful and regular tree viewing, outlines strategies for improving your observations, and describes some of the most visually interesting tree structures, including leaves, flowers, buds, leaf scars, twigs, and bark. In-depth profiles of ten familiar species—including such beloved trees as white oak, southern magnolia, white pine, and tulip poplar—show you how to recognize and understand many of their most compelling (but usually overlooked) physical features. (Review from *Google Books.com*)



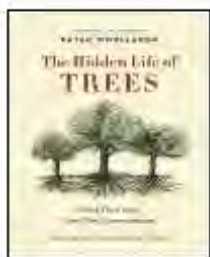
### **Seeing Seeds: A Journey into the World of Seedheads, Pods, and Fruit**

Teri Dunn Chace (author), Robert Llewellyn (photographer)  
Timber Press, Sep 26, 2015

A centuries-old saying goes, “Great oaks from little acorns grow.” But as this dazzling book reveals, there is much more to a seed than the plant it will someday become: seeds, seedheads, pods, and fruits have their own astounding beauty that rivals, and sometimes even surpasses, the beauty of flowers. Bitter melon seeds resemble a handful of rubies. Poppy pods could be *art nouveau* salt shakers. And butterfly vine seeds look exactly like those delicate insects captured in mid-flight.

Seeds also come with fascinating stories. Jewels of Opar got its name from a fabled city in Edgar Rice Burroughs’s Tarzan stories. Lotus seeds sent into orbit by Chinese scientists came back to earth mysteriously altered. And fava beans—beloved of foodies—have a Jekyll-and-Hyde personality: they can cause the debilitating condition known as favism in some individuals and at the same time combat the microorganism that causes malaria.

In these stunning pages you’ll gain an understanding of how seeds are formed and dispersed, why they look the way they do, and how they fit into the environment. *Seeing Seeds* will take you to strange and wonderful places. When you return, it’s safe to say that you’ll never look at a seed the same way again. (Review from *Google Books.com*)



### **The Hidden Life of Trees**

Peter Wohlleben  
Graystone Books 2016

Are trees social beings? In this international bestseller, forester and author Peter Wohlleben convincingly makes the case that, yes, the forest is a social network. He draws on groundbreaking scientific discoveries to describe how trees are like human families: tree parents live together with their children, communicate with them, support them as they grow, share nutrients with those who are sick or struggling, and even warn each other of impending dangers. Wohlleben also shares his deep love of woods and forests, explaining the amazing processes of life, death, and regeneration he has observed in his woodland.

## ANNUAL MEMBERSHIP APPLICATION/RENEWAL

The **Alaska Native Plant Society** was organized in 1982 by an enthusiastic group of amateur and professional botanists. It is a non-profit educational organization with the goal of uniting all persons interested in the flora of Alaska. Membership is open to any interested individual or organization. If you wish to join us, please indicate the category of membership you desire, fill in the form below and mail it with the appropriate remittance to:

**Alaska Native Plant Society,  
P.O. Box 141613,  
Anchorage, AK 99514**

STATUS  New  RENEWAL

CATEGORY

- |                          |                   |      |
|--------------------------|-------------------|------|
| <input type="checkbox"/> | Full-time Student | \$12 |
| <input type="checkbox"/> | Senior Citizen    | \$12 |
| <input type="checkbox"/> | Individual        | \$15 |
| <input type="checkbox"/> | Family            | \$20 |
| <input type="checkbox"/> | Organization      | \$30 |

Name \_\_\_\_\_

Address \_\_\_\_\_

City: \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Telephone: (Home) \_\_\_\_\_ (Work) \_\_\_\_\_ E-Mail: \_\_\_\_\_

**Membership is on a calendar year basis.**

**START THINKING SUMMER - and Botany Field Trips! Help us plan our summer field trip schedule. See Page 6 for Field Trip Planning Form. Fill it out and return to Dennis Ronsse. Let's make this a great field trip summer!**

Alaska Native Plant Society  
P.O. Box 141613  
Anchorage, AK 99514