

Diggin' in The Dirt: Reed Canary Grass

By Chip Bubl
Oregon State University
Extension Service - Columbia County

Caring for Your Large Pond (and the Wildlife That Use It!) Workshop - Saturday, April 6, 2019

Sauvie Island Grange 8:30 am - 3:45 pm. Whether your pond is for irrigation or fire suppression, whether it's neglected and weedy or meticulously landscaped, you'll find lots of important information packed into this one-day workshop. Topics will include: vegetation control, mosquito control, sedimentation, water quality, creating habitat, and attracting songbirds, turtles, and other wildlife. Part of the day will be spent walking around a pond, so wear appropriate footwear. \$30 registration fee includes coffee, snacks, and lunch. Pre-registration is required by April 3 at wmswcd.org/event/caring-for-your-large-pond/. Scholarships are available: contact pondworkshops@gmail.com with any questions and/or to request a scholarship.

Scappoose Bay Watershed Council's Native Plant Sale - Saturday, April 13

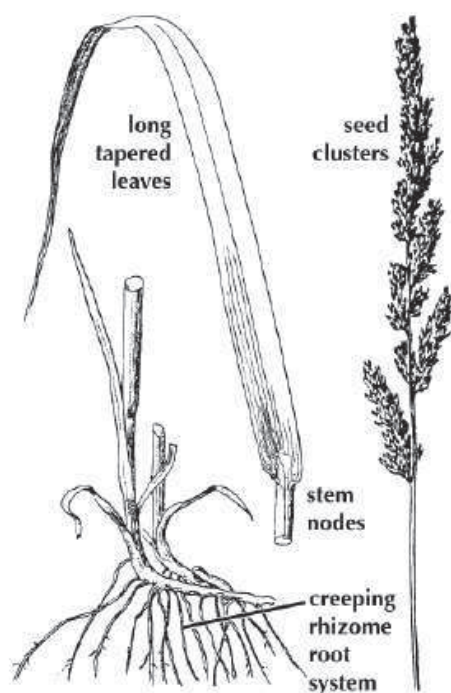
Join the Watershed Council at their Spring Native Plant Sale, Saturday, April 13, from 9:00 am - 3:00 pm. This is their semi-annual event to get you ready for spring and summer planting. They have lots of new plants at great prices - all native to our area. Staff and volunteers are available to help choose plants, suggest gardening ideas, and provide information on establishing and maintaining native vegetation. For more information see <http://www.scappoosebay-wc.org/native-plant-nursery/>. The SBWC nursery is located behind Scappoose High School. Look for signs - go east on SE High School Way and turn into the parking lot between the high school and the school ball field areas.

Reed canary grass

Reed canary grass (RCG) was first planted as a forage species in Columbia County in the 1920s. I have a picture of the Extension Agent at the time, George Nelson, planting the experimental field of European RCG seed on Clatskanie dike land. Subsequent plantings were made on dike land farms in Rainier, Deer Island, and Scappoose and on riparian edge pastures in the Nehalem Valley. If I could roll the clock back, I would. Reed canary grass is tall, coarse

bladed, and quite invasive, choking out native vegetation on riparian sites up and down the Columbia River and in wetlands all over the county. This plant has been responsible for more native plant restoration project failures than any other cause, especially in the lower Columbia River area.

Reed canary grass spreads over distance by seed carried by birds and animals and root/crown fragments that move downstream in floods. Once established on a site, individual plants clone themselves by aggressive runner and crown production until they are the only plant standing over large acreages. While Reed canary grass prefers moist pastures and wetlands, it is quite competitive on some upland sites as well. RCG appears to have two operating systems, one for wetter sites and another for drier ones. Move it from its original favorite site



type and it will turn off the old operating system and turn on the new one. This is called "genetic plasticity" and RCG has it in spades.

Reed canary grass is a perennial plant that dies back in the winter and produces new shoots from the crown in early spring. But since we have it, what is its feed value and what are the best ways to handle it? First, when grazed or harvested immature (less than 24 inches tall) it has fair digestibility (energy) and average to above average protein content. Quality drops off faster than any other grass as it gets more than 2-3 feet tall. In Columbia County, it can get 9

feet tall!

Unfortunately, RCG grows quickly in the spring, often on fields that can't be grazed or harvested because they are too wet. RCG can be clipped to preserve forage quality. Some farmers put their stock out early on the best drained land to graze RCG once it gets 8-10" tall down to 3-4" and then take the re-growth as either further short term grazing, hay, or round bale silage. Second cuttings are common if the first one is removed (weather allowing) in early to mid-June at the latest. Given the lack of great drying weather at that time of year, putting up round bale silage or grazing is often the preferred harvesting method.

Reed canary grass has some problems, though. Most of the stands are from European seed. These strains produce forage with significant amounts of alkaloids that make the forage taste bitter and thus less palatable, slowing grazing consumption. This, by itself, reduces predicted gains as forecast by the measured protein and TDN of the forage. Alkaloid concentration increases as the forage matures. The alkaloids can also directly affect digestibility and pass through in the rumen and/or increase diarrhea, and thus reduce the effective protein and energy actually utilized by the livestock. Finally, especially with sheep, there may be a fungus that attacks the leaves of canary grass that can cause severe photosensitive reactions including swelling, facial edema, skin loss, and potentially, death. Nitrogen (especially ammonium) fertilizers seem to increase the alkaloid concentration.

So, I wouldn't miss this plant. But is it possible to get rid of it or even slow it down? There are two things that RCG doesn't like: two feet or deeper water and heavy shade. There have been some projects that were able to change the water depth to eradicate RCG. Some native plants like wapato and rushes increase as RCG becomes stressed by the higher water. These projects are very complex and usually need a lot of engineering. And it doesn't slow down RCG at the water edge or the near upland margins.

Deep shade sites created by well-established conifers will resist RCG invasion. The most wet-tolerant conifers are western red cedar, grand fir, and western Ponderosa pine. Alder and cottonwoods do not stop reed canary grass at all. Big-leaf maples, combined

with cedars, seem to be fairly effective at slowing RCG, at least in lower elevations. Super densely-planted willows and red-osier dogwood are worth a look on wetland edges.

For new competitive plantings, the RCG needs to be knocked back first. There are some aquatically-labeled forms of glyphosate (the generic name of Roundup) that are very effective in killing about 95% of the RCG stand if the material is applied when the RCG is actively growing. But once you plant willows, conifers, or other species, you would need to spray extremely carefully to avoid injury to what you had just planted. But it has been done and good RCG-competitive stands have been established.

Efforts to start and/or maintain a competitive planting by repeated mowing of the RCG haven't usually panned out. That said, if it was a small area and you could mow twice a week throughout the active growing season, it might work. You would need to do hand work around your planted trees and shrubs to keep from mowing them out as well.

Landscape fabrics, if it is not in a flood prone area, can work after an initial RCG kill. But large populations of voles (aka field mice) develop under fabric and attack trees you planted in holes in the fabric, often killing them. You would need a well-thought out program of vole control to succeed.

If you have a project that might involve Reed canary grass, talk to me and/or Maggie Peyton of the Upper Nehalem Watershed Council for advice. In addition, there may be an option to use a newer "grass-only" RCG control herbicide in after-planting maintenance efforts on certain locations.

Free newsletter (what a deal!)

The Oregon State University Extension office in Columbia County publishes a monthly newsletter on gardening and farming topics (called Country Living) written/edited by yours truly. All you need to do is ask for it and it will be mailed or emailed to you. Call (503) 397-3462 to be put on the list. Alternatively, you can find it on the web at <http://extension.oregonstate.edu/columbia/> and click on newsletters.

Take excess produce to the food bank, senior centers, or community meals programs. Cash donations to buy food are also greatly appreciated.

The Extension Service offers its programs and materials equally to all people.

Contact information for the Extension office

Oregon State University
Extension Service - Columbia County
505 N. Columbia River Highway (across from the Legacy clinic)
St. Helens, OR 97051
(503) 397-3462
Email: chip.bubl@oregonstate.edu

Vernonia's Voice is published twice each month on the 1st and 3rd Thursday. Look for our next issue on April 4.

NEW LOCATION

The
BLACK BEAR
COFFEE COMPANY

Just Suck It Up!

FRESH ROASTED COFFEE
ESPRESSO • BAKED GOODS

OPEN EVERY DAY AT 6:00 AM

825 BRIDGE STREET
503-429-0214

MORRISON
REMODELING
INC

- Kitchen & Bathroom Remodels • Finish Carpentry
- Ceramic Tile Work • Custom Home Construction
- Additions • Commercial Tenant Improvements

Jim Morrison, Jr.
General Contractor
CCB# 112057

Ph: (503) 429-0154
MorrisonRemodeling@hughes.net
Vernonia, OR 97064

• Licensed • Bonded • Insured