



BONNER COUNTY NOXIOUS WEEDS

1500 Hwy 2, Suite 101 • Sandpoint, ID 83864 • Phone: (208) 255-5681ext.6
<https://www.bonnercountyid.gov/noxious-weeds>

Weed of the Month

By Chase Youngdahl

With any luck the wildfire smoke will have subsided by the time this is published—unfortunately, the annoying haze has become a common phenomenon during August in the northwest. That aside, I hope you all have had a fun and productive summer full of adventures and weed killing! As a reminder, if you are part of our Neighborhood Weeds Cooperative program and have not turned in your end-of-season paperwork and herbicide receipts to the Bonner County Weeds office (or your group coordinator), DO IT NOW. Government budgets operate off of the fiscal year calendar, which is October 1 – September 30; this necessitates the August 31 deadline so as to allow time to analyze the numbers, and process the payments and associated backup within the current fiscal year. If you are not familiar with the Neighborhood Weeds Cooperative, feel free to get in touch with Bonner County Weeds for details. My office may be contacted by phone, email or Facebook message.

Weed of the month is **Western Bracken Fern** (*Pteridium aquilinum*), the most widely distributed of the ferns. This is native to the Western United States so it's not an Idaho State or Bonner County listed noxious weed, but it is very poisonous to cattle and horses and common enough in the Bonner County area to make it worth being in the spotlight this month as a weed of concern. Bracken Fern is estimated to be over 55 million years old according to fossil records, and its primitive reproduction system is certainly indicative of it being a prehistoric plant. The entire stem and leaf complex is referred to as fronds—the stem portion is triangular shaped and the leaf portions are large and highly divided with hairs on the underside. It grows 2-4 feet in height and spreads by root stalks and spores; the spores are reddish-brown and found on the underside of the fronds. The spores usually release around mid-late July.

Bracken Fern can be found in full sun, partial sun and shaded sites; pastures, timbered areas, roadsides, CRP lands and vacant lots are all areas that the Bracken Fern calls 'home'. It begins its growth process in the spring and remains green until the first heavy frost—it acts as a deciduous plant in [colder] environments like ours. The brand new fronds in the spring appear knobby, then develop a fiddleneck appearance as they unroll, coming in to their full glory sometime in May.

With Bracken Fern being indigenous to the United States, it has its place in the ecosystem as a whole—it is a food source to some moths. However, the bag of negatives include allelopathy, severe livestock poisoning, and some research according to USDA-ARS (United States Department of Agriculture – Agricultural Research Service) has suggested that it is carcinogenic to humans. I'll start with elaborating on allelopathy; Bracken Fern releases allelopathic chemicals which may interfere with other plants' ability to grow. This has shown to be an issue at times in timber reforestation situations, where Bracken Fern will take hold in a recently logged or burned area and suppresses the growth of newly planted



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conifer seedlings, or takes over a unit before planting even happens. Livestock poisoning is usually chronic with effects taking hold 2 - 4 weeks post consumption. The signs of Bracken Fern poisoning are different in cattle than they are in horses, I will list out both. The following are signs of poisoning in cattle: high fever, loss of appetite, depression, difficulty breathing, excessive salivation, nasal & rectal bleeding and hemorrhages on the mucous membranes. The following are signs of poisoning in horses: weight loss, loss of coordination, twitching muscles, crouching stance (back arched with legs apart) and convulsions. Poisoned animals seldom recover, although if caught early enough in horses, intravenous injections of thiamine hydrochloride may act as an antidote. Livestock will generally avoid Bracken Fern, although since it remains green for such a large portion of the growing season they could graze on it late in the summer (right around now) if not much else is available to them, as well as first thing in the spring when the fronds are succulent and palatable. Another avenue for poisoning is via contaminated hay—know your source! Poisoning is only likely to occur if the hay is 20% [or more] Bracken Fern, and again, symptoms would not show until 2 - 4 weeks post consumption. Bracken Fern is not something you want in or near an active pasture.

Effective control methods include mechanical and herbicide options; the plants and associated roots can be destroyed by repeated cultivation, and/or it can be mowed throughout the growing season to keep the fronds from developing any kind of browse-worthy forage. There is an herbicide specially formulated for Bracken Fern (as well as some annual & perennial grasses) called Asulox® (asulam), a solid option if some grass kill can be tolerated. Asulox® would likely be the preferred product in timber reforestation prep. Bonner County Weeds has had decent luck killing it with a blend of broadleaf herbicides including Milestone® (aminopyralid), MSM60 (metsulfuron) and a 2,4-D amine once the fronds have fully developed.

Fall can actually be a great time for achieving control on a number of perennial weeds if the correct strategies are used, just get it done before the distraction of elk season for maximum results (kidding...sort of)! As always, don't hesitate to reach out to the Bonner County Weeds office for advice.