WEED OF THE WEEK BLAINE BUG CREW

Leafy Spurge: The Most Noxious Of The Noxious

By Blaine Bug Crew

With the best of summer also comes the worst. In the noxious weed category, that could most definitely be leafy spurge. This weed loves the climate of Idaho's backcountry and is a constant threat to native species. This weed is already well established in the mountains north of Fairfield. Hopefully, the information we give you today will help you identify this invasive species if you come across it.


Leafy spurge (Euphorbia esula).

Leafy spurge is a deep-rooted, aggressive, persistent perennial that reproduces vegetatively and by seed. Plants have an extensive root system that grows horizontally and is capable of reaching depths of up to 20 feet. Stems are thickly clustered and have narrow, alternate leaves that exude a milky latex when damaged. This milky substance can blind you if you get it in your eyes.

The flowers are small and yellowish-green and are enclosed in showy yellow-green bracts. Seeds are oblong and occur in clusters of three. When the seeds are dry, the capsules shatter and spread the seeds as far as 15 feet from the plant. Leafy spurge is commonly found in grassland and rangeland habitats, but is also capable of invading forests and riparian areas, displacing native vegetation. This plant is poisonous to horses, cattle, and wildlife. Luckily, the Blaine Bug Crew has an insect predator that feeds on leafy spurge.

Adult Oberea erythrocephala have red heads, black eyes, and slender bodies with antennae that are nearly as long as the body. Males emerge several days before females and both sexes are sexually immature for two weeks before they start mating. Females often girdle the upper part of the stem, gnaw a hole into the stem above the girdle, and deposit an egg into the hole from the end of June to mid-July. Each female can produce approximately 60 eggs during her lifetime.

Larvae hatch 10 days after eggs are laid and feed in leafy spurge stems on the pith, tunneling downward to the root crown where they remain during the winter. Mined stems dry, wilt and do not produce flowers or seeds. Crown and root feeding reduces the plant's root reserves and allows pathogenic fungi to enter infested leafy spurge roots. Oberea erthrocephala prefers moist areas with trees and can survive subfreezing winter temperatures.

As one can gather from this article, leafy spurge is extremely noxious and aggressive. One interesting note about this weed is the fact that goats love it. They think it is candy and they suffer no ill effects from eating it. Herds of goats have even been employed in steep drainages in Idaho's backcountry to try to stop the spread of this invader.

If you see an infestation of this weed in your travels, please call Kay Draper with the Blaine County Weed Department at (208) 788-5543.

COLUMN EDUCATION

COVID Not Only Thing Changing Education

By Eric Valentine

Blaine County School District—like all school districts—is finding itself impacted by the COVID-19 pandemic as much as any other organization on the planet. As if virtual classes, budget shortfalls and new safety protocols weren't challenging enough, many parents, economists and governors want schools to physically reopen sooner than later and the President of the United States may try to force their hand to do so.

All that means a lot of change is coming to the school district in the fall and into 2021, and perhaps beyond. Change was something a number of parents, teachers and other stakeholders had been vocally calling for the past few years. It just wasn't that kind of change they wanted.

What's interesting to watch is how the change those folks did in fact want seems to be happening, not because of the coronavirus pandemic, but in spite of it.

First and foremost on the list of concerns some parents and teachers had involved BCSD superintendent GwenCarol Holmes. They complained about what they described as an environment of retribution they claim Holmes created for anyone raising issues about anything BCSD. Fair or unfair, or somewhere in between, cut to 2020 and Holmes announces she will not be seeking to extend her contract, which ends June 20, 2021.

Now the school board has launched a search for a new superintendent. But before that happens, trustees needed to select a firm to manage that search. They have selected Hazard, Young, Attea & Associates, an executive search firm experienced in finding talent for resort communities such as a recent one they did in Aspen and Vail, Colorado. At the school board's July 21 meeting, the firm will present its plan to find a good fit for superintendent.

What we know now is that the plan involves a tremendous amount of community input to come up with candidates trustees will ultimately select. Fifteen one-hour focus groups of up to 15 people will be held. Four larger community forums will also be slated for August. And an electronic survey will be sent out around Labor Day as well.

The July 21 session will be available to view on the Blaine County School District Board of Trustees channel on YouTube, most likely by the next day. And if you're someone who was seeking change in how things were run at the school district, you should probably view it.

In fact, you may want to view the regular board meetings, too. They … have changed. In part, they are different because they are done Zoom-style on the YouTube channel. You get to see the books, in some cases, trustees have apparently read. But moreso, and more seriously, they have changed in that they are board-centric, not staff-centric, as past sessions have been. In a recent meeting on a particular topic, board president and local attorney Keith Roark—politely—muted the superintendent from participating in a discussion. If there ever had been strong-handed control of a board topic in the past—it's something Holmes' critics often complained about—it's not happening under Roark. Meetings are run with the efficiency of a courtroom.

The webcast sessions are also efficient because you can fast forward and rewind as needed, so you don't have to spend any time on any topic that doesn't interest or titillate you. And besides, it's summer, and there's nothing good on TV until the fall. At least that's how things used to be.

COFFEE CHATS WITH KIKI KIKI TIDWELL

MICROGRIDS UPDATE

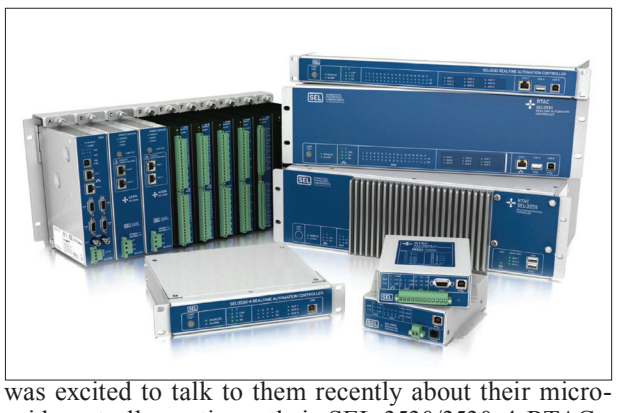
BY KIKI TIDWELL

Our Silver River Place apartment building in Hailey is going right up and I have been working on a microgrid design for this all-electric building with solar and battery storage. This is breaking trail a bit in Idaho as there are almost no microgrids installed yet in this state, even though they have been widely deployed everywhere else. In fact, California's utility, PGE [Pacific Gas and Electric Company], solicited bids this past December to install 20 microgrids next to its substations by June in advance of wildfire season. "In a presentation before the California Public Utilities Commission last week, PG&E said that the microgrids are expected to keep power flowing to thousands if not tens of thousands of customers per substation during a power shutoff." [2] Microgrid technology is hitting its stride. "Navigant expects global microgrid capacity to reach 19,888.8 MW by 2028, up from 3,480.5 MW in 2019." [2]

At the heart of a microgrid, and what makes it different than just a backup generator, is a controller, a 'smart' hardware and software component that can tell the system to 'island' the microgrid from the main grid in certain circumstances and run off of local power generation, whether it be solar panels or natural gas or diesel generators. For our building—and this may not be applicable to other situations—I would like to use the maximum amount of generation from our solar panels to be used by our building's units first to reduce the amount of power that tenants will have to buy from Idaho Power. I see the solar component as an amenity of the building, like extra insulation or high-efficiency appliances that lower electrical bills; we won't be charging tenants for this power. So, conceptually, the solar creates power all day that is delivered to the units and charges up a battery with any extra power generated. As the building goes into the evening hours, that stored battery energy is used until the battery gets low and the controller 'smartly' sees this signal and tells the system to stop islanding and connect back to the main grid for power.

If our building can provide much of its own power in the heat of July, it can help Idaho Power by reducing its demand from the main grid during peak irrigating summer days when the main grid system is straining at maximum load. Producing power right next to where it is going to be used is also very beneficial. "Delivering power from afar is inefficient because some of the electricity—as much as 8 to 15 percent—dissipates in transit." Idaho Power doesn't have to produce 15 percent more power to get it to us at the edge of the grid here in Blaine County and all ratepayers don't have to pay to build $300 million peaker plants for just that peak load capacity a couple of days a year.

We are lucky to have a great company, Schweitzer Engineering Laboratories, co-located in Idaho, with expertise in designing and installing microgrids worldwide. I



was excited to talk to them recently about their microgrid controller options, their SEL-3530/3530-4 RTACs, which only cost $3000-$7000 as components (plus some engineering cost and software 'library'). Right now the solar panels component is costing out at approximately $35,000 after federal tax credits and accelerated depreciation for a system that should provide 35,758 kWhs per year. Adding a solar generation microgrid is actually a reasonable part of the building's overall cost, especially when it will result in much lower utility costs for tenants over the next 20 years. I would like to encourage other building developers to consider looking at a microgrid for their buildings and am happy to share our information further.

For anyone else curious for more information about microgrids and how they are being deployed rapidly all over, please go to https://microgridknowledge.com. The videoed sessions from their last conference are available now on their website for free, which is truly a bargain.

1. https://microgridknowledge.com/pge-20-microgrids-wildfire/
2. https://microgridknowledge.com/microgrid-defined/