

Notes from a Rogue entomologist

Partnering to address pesticides in streams

BY RICHARD J. HILTON

Reducing pesticides in our streams and surface waters is the goal of the Pesticide Stewardship Partnership (PSP). The PSP, developed by the state of Oregon, brings together a wide array of state and local agencies, such as the Department of Agriculture (ODA), Department of Environmental Quality (DEQ), Oregon State University (OSU), the local OSU Extension, soil and water conservation districts, and experts in forestry and health.

Over the past three years, I have been involved in a local PSP project focusing on the Middle Rogue (Bear Creek) watershed. The state initiated this project in 2014, taking water samples

from various tributaries of Bear Creek and testing them for pesticides. The monitoring focuses on those pesticides that are the most problematic or most used. The good news was that none of the detected pesticides were above any threshold levels, but the bad news was that a number of different pesticides were detected, some frequently. The testing showed that most of the pesticides found were herbicides or weed killers. No fungicides and only a few insecticides were detected.

In light of these results, I became involved in a program of education and outreach to our local pesticide users. Pesticides can get into streams in many ways: in the air due to spray drift, and in water via leaching

Photo, left: Stream being sampled for pesticides. Photo: Jackson Soil & Water Conservation District.

Photo, below: Old DDT containers collected for disposal. Photo: Oregon Department of Agriculture.



through the soil or in surface runoff. The problem is complicated by the fact that in the Bear Creek watershed, pesticides are used in a variety of settings, including agriculture, forestry, rights of way, as well as residential and landscape use.

Over the years, my work has revolved around the integrated management of insect and mite pests in orchards and vineyards. In this project, however, I found myself confronted with an issue that went well beyond my expertise. So with assistance from the ODA, I and my colleagues at OSU undertook a collaborative approach.

Personnel from the Integrated Plant Protection Center at OSU, which has a wealth of experience related to the proper use and application of pesticides, held focus groups with growers and other pesticide users. The purpose of these focus groups was to raise awareness and foster dialog regarding ways to tackle the problem. The growers I work with strive to be good stewards of the environment—the land is their number-one asset, and they realize that it is their job to take care of it.

At my invitation, OSU's expert in spray technology recently traveled to southern Oregon from Hood River to lead workshops for our orchardists and vineyardists to provide the latest information on sprayer calibration and application in order to minimize the amount of spray drift. It is incumbent on everyone who uses pesticides, from homeowners to the large-scale growers, to use these materials responsibly, always following the label. When pesticides are used, they need to be applied correctly with every effort taken to prevent their

movement off target. That is the goal of this partnership.

An additional component of the PSP was to conduct pesticide-collection events locally. To date, three events have been held; these were aimed at growers and other commercial pesticide users and resulted in the collection and proper disposal of over 25,000 pounds of unwanted and unused pesticides, including many old containers of DDT.

When I checked with the DEQ to see if any sampling had been done in the Applegate watershed, I was informed of a statewide survey done around five years ago where a sample was taken from the Applegate River near Highway 199. In that sample a single pesticide, the herbicide diuron, was detected at a low level. Diuron is the most commonly found pesticide in streams across Oregon. This pre-emergent herbicide is used in a variety of crops and in non-crop areas such as roadsides. In response to these types of findings, Oregon Department of Transportation took action and, from 2010 to 2015, reduced their use of diuron by almost 90 percent.

The PSP approach to this problem has been employed in other watersheds in Oregon with positive results. While our local partnership by itself will not resolve the issue, it does provide a means to address the problem in a proactive and cooperative way.

Richard J. Hilton

541-772-5165 ext. 227

Senior Faculty Research Assistant /
Entomologist

Oregon State University-Southern
Oregon Research & Extension Center
richardhilton@oregonstate.edu

OPINION

Smokey the Bear says 'resist'

BY LUKE RUEDIGER

President Trump is now in the White House signing executive orders and taking unilateral actions that could destroy the social fabric of our communities and the integrity of our environment. In my lifetime, I have never seen a threat that is so widespread and comprehensive. As a community and as a nation we must stand up for freedom, respect, and environmental responsibility.

On January 21, 2017, millions of people around the world joined the Women's March in opposition to the Trump agenda. Locally, 8,000 people, including many Applegaters, showed up in Ashland to protest Trump, his cabinet, and his agenda.

Trump has responded to the protests by signing executive orders and memorandums that threaten the rights of women and immigrants, eliminate important environmental regulations, and encourage development of the Keystone XL, Dakota Access, and even the local Jordan Cove LNG pipeline in southern Oregon. These pipelines have been strongly opposed by local communities, affected landowners, tribal governments, and large numbers of the American population.

Trump has also imposed a "gag order" on the Environmental Protection Agency (EPA), the Department of Agriculture, and the Department of the Interior so they cannot publicly

comment on the effects of Trump's new climate policy. Although Trump can avoid the media if he likes, stating that he would rather communicate directly with the people through social media, government agencies, including our local forest service, have been barred from open lines of communication with the public. Routine decisions once made locally regarding public communication, public involvement, the announcement of public meetings and press releases now must be cleared by the administration in Washington, DC, adding another layer of big government and a hindrance to local collaboration.

In response, the folks within the National Park Service have gone rogue and are posting on Facebook and other sites in opposition to Trump's gag order. Numerous websites, Facebook pages, and Twitter accounts have been created that provide opportunities for federal employees to speak out on their own personal time. Thus far, the coalition represents Arches, Shenandoah, Yosemite, Badlands, Yellowstone, Grand Canyon, Blue Ridge Parkway, and Great Smoky Mountains national parks. It's time for Crater Lake, Lava Beds and Oregon Caves to get involved. As I write this article, government agencies like the EPA, the US Forest Service, and the National Weather Service are also joining in, creating unofficial Twitter accounts

to defy the gag order. In fact, nearly every science-based government agency is now involved.

Trump is severing the ties between our government agencies and the public, harvesting mistrust, and impacting our ability to create meaningful relationships, transparent planning processes, and collaboration. Many wonder how this inability to openly communicate will affect local collaborative processes like the Applegate AMA, the Upper Applegate Demonstration Treatment Units, future timber sales, trail development, and other local federal-land-management projects heavily supported by the community. These popular land-management projects depend on open, transparent lines of communication, trust, and respect between collaborative partners.

To make matters worse, Trump has instituted a hiring freeze on government employees. Trump's order states that "no vacant positions...may be filled and no new positions may be created, except in limited circumstances." The idea is to trim the federal workforce through attrition despite the fact that, since 1994, according to the National Finance Center, the US Forest Service (USFS) workforce has declined by 45 percent. Current staffing levels leave many important issues, including species surveys, road and trail maintenance, recreational management and project monitoring,



minimally addressed. Under Trump, this will only get worse. Locally, it means professionals such as botanists, wildlife biologists, recreation planners, and firefighting personnel cannot be hired.

Many wonder if agencies like the USFS can continue collaborating with local communities, implementing science-based management, and providing acceptable levels of transparency under a Trump administration. When campaigning in Oregon, Trump vowed to increase public land logging and reduce environmental regulations. Many are concerned how this might affect BLM's already timber-heavy approach. The future is uncertain, but as long as federal agencies and the public cannot communicate effectively, controversy, gridlock, and litigation will prevail.

We are being thrust back into the era of corporate dominance, secretive government management, and ineffective environmental regulations that could leave a lasting legacy of environmental destruction, impoverished local communities, and a devastated resource base. In the short term, corporate and industrial interests will thrive; in the long term, we will all pay the price.

Even Smokey the Bear says "Resist." I, for one, will be happy to join him.

Luke Ruediger
541-890-8974