

IN DA WOODS

by Melanie B. Fullman, US Forest Service

SPREAD THE WORD, NOT THE SEEDS

For many locals, fall = hunting. For plants, fall = seed dispersal. And for non-native plants, that means another chance to try to rule the world.

If you drive any vehicle on an unpaved road surface, chances are you are helping disperse the seeds of plants. This may not seem like a problem unless those seeds are from non-native invasives. Even if your vehicle moves only a few seeds a short distance, natural events such as wind gusts, rain, or wild animals can spread the seeds farther. As we discussed earlier this year with boats, there just aren't any 'safe' seeds.

In 2007, a plant research team at Montana State University began a series of experiments to determine the number of seeds transported on various types of vehicles and to evaluate the effectiveness of vehicle washing. Their study found that vehicles collect significant amounts of seeds even when driven on dry roads. For example, a four wheel drive SUV/truck picked up, on average, 176 seeds per 50 mile trip on an unpaved road in June. ATVs picked up as many as 200,000 seeds in 48 miles or nearly 4200 seeds per mile! (Of those, 750 were from noxious weeds.) Not surprisingly, ATVs acquired more seeds off-trail than on-trail.

To determine how far the seeds could be carried, the researchers mowed 12' x 40' plots. A late model pickup truck was driven into each plot and backed out. It was then driven 25 mph for 10 miles, after which, the undercarriage was carefully vacuumed. The results: there was 1633 seeds at mile 0; 510 at 0.1 miles, 226 at 1 mile, and 138 at 10 miles.

And while commercial vehicle washers did a decent job of removing mud and debris, the researchers found that, at many locations, wash waste water is filtered to remove sediment, then reused for future washes. Although hot water and filtration killed most seeds, many went through the process unharmed. So many, in fact, that the scientists were able to grow them in a greenhouse to determine the species.

Why Does It Matter?

Invasive species negatively affect the quality and accessibility of recreational lands. Invasive species often out-compete and, in some cases, eliminate native plants; they change wildlife habitat; and they can modify the appearance and utility of the landscape. Some invasive plants produce painful skin reactions or may have sharp spines and thorns. Toxic berries sometimes poison people and pets. Private landowners are increasingly inclined to limit or prohibit access, particularly motorized access, due to concerns about the spread of invasive plants onto their lands.

Left unmanaged, these threats contribute to diminished quality and quantity of outdoor recreation. The annual economic damage associated with invasive species' is estimated to cost \$137 billion in just the US. This includes losses in agriculture, fisheries, timber, utilities, land productivity, tourism, and recreation.

What Can You Do?

Learn to recognize invasive species common to the areas where you enjoy outdoor recreational activities. Read guides, brochures, and pamphlets produced by government agencies or weed management groups on invasive plants and invertebrates. Pay attention to signs at infested areas and trailheads.

Stay on established trails and routes. Tread lightly, leaving as little impact on the land as possible. When wet areas are encountered on established trails, go through them rather than around (this prevents the trail from becoming super wide, too.) **When in doubt, stay out!**

Spray, scrape, or brush dirt from your vehicle(s), then thoroughly wash with soap and hot water as soon as possible. Pay particular attention to the undercarriage.

Soil, seeds, and plant parts can cling to gear and clothing, too. Wear outer layers of clothing and footwear that are not “seed-friendly.” Wear ankle gaiters over socks and laces. Avoid Velcro, pants with cuffs, and fabrics or clothing that readily carry seeds.

Pet your pets. Carry a grooming brush, shedding blade, small scissors, hoof knife, etc. to remove ‘stickers’ and seeds from animals.

Clean your stuff away from water, which can spread invasive species downstream. Choose cleaning spots where invasive species are already established or that be monitored for new infestations, such as along roads, at trail heads, or in parking lots.

Dispose of your ‘hitchhikers’ by placing them in the trash. If burning, place the burn pile in an area that facilitates easy monitoring and control if an infestation occurs.

Report infestations of invasive species to the appropriate land manager or property owner. Give an exact location if possible; photos, GPS coordinates, or a map are even better.

Volunteer to help control invasive species. Contact agencies and nonprofit organizations to find out about volunteer opportunities.

Educate others about invasive species and their affect on the environment, economy, and recreational opportunities.

Fall is a great time, some would say the best time, to spend time in the woods. Motorized travel is just one of many ways to enjoy the season. Here’s hoping your memories of this autumn are fun and numerous...and weed-free.

A bit of water and time saves public lands for future generations:



Tried to include photos from the Montana State research project but had trouble getting the pictures to transfer (see image below); you might prefer to try directly from http://weedeco.msu.montana.edu/rangewildland/Seed_dispersal.html

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"Being in charge is a lot like being a lady. If you have to tell people, you probably aren't." – British Prime Minister Margaret Thatcher