

University of Idaho
Cooperative Extension System

## **UI Extension Forestry Information Series**

## **Pocket Gophers and Tree Seedlings**

Chris Schnepf

Interest in planting tree seedlings is increasing. Unfortunately, the job is not done once the tree is in the ground. A variety of animals may injure or kill tree seedlings. One common threat to seedling survival is the pocket gopher.

Pocket gophers are small rodents that live in extensive underground burrow systems. Gophers live on roots, seeds, and other plant parts and serve a valuable ecological role. Gopher burrows help to cycle nutrients and provide space for air and water to move through the soil.

Unfortunately, large pocket gopher populations can wreak havoc on forest plantations. Pocket gophers prefer habitats with abundant forbs (non-woody, broad-leaved vegetation), many of which have large fleshy roots for them to eat. When a site is disturbed by harvest or fire, many of these plants move in, and with them come pocket gophers.

Most nursery-grown seedlings have been weeded watered and fertilized, making them very attractive to pocket gophers. Pocket gophers may clip seedling roots, pull seedlings underground, or clip or girdle seedlings above ground, often working under winter snow cover.

Gopher damage risk can be estimated by first looking for fresh dirt mounds (see graphic). If no mounds are currently present you still need to be concerned. Gophers can reproduce rapidly once they invade a favorable site. Is the site becoming heavily vegetated by plants favored by gophers? Do adjacent sites have active gophers? If you have a high risk of gopher

damage, the following methods may be used individually or in combination:

- •Removing forbs and other gopher food. Gopher numbers may be reduced by using herbicides prior to planting, to remove plants they feed on.
- •Enhancing natural predators. Badgers and many birds of prey feed on pocket gophers. Leaving a few snags as perches may help owls and other raptors prey on gophers.
- •Using pesticides. Grain laced with strychnine alkaloid is the most common method of poisoning gophers. Probes or other devices are used to place the bait in burrows. Be careful about non-target animals when using these compounds. Fumigants are also sometimes used over limited areas.
- Trapping. Traps placed in burrows may be used if gophers are in a limited area. Many trap styles are available.
- Vexar. Vexar is a rigid plastic mesh tubing used to prevent deer damage. Burying the base of the tubing underground with the seedling deters pocket gophers somewhat too.

For more specific information on identifying, and controlling pocket gopher seedling damage, stop into your local University of Idaho Extension office and ask for a copy of EC 1255: *Controlling pocket gopher damage to conifer seedlings* (OSU), or related publications.

This information first appeared in Woodland NOTES, Vol. 3, No. 2.

**About the Author:** *Chris Schnepf* is an Area Extension Educator - Forestry and Professor at the University of Idaho.