



Whatcom Weeds

Whatcom County Noxious Weed Control Board 901 W. Smith Road Bellingham WA 98226
(360) 354-3990 www.co.whatcom.wa.us/public_works/weeds

PATERSON'S CURSE

Echium plantagineum

THREAT: Patterson's curse, also called salvation Jane or purple viper's bugloss, is native to the Mediterranean region of Europe and North Africa, and has been introduced as a garden ornamental or seed contaminant. It has become a major pasture weed in Australia and was found in Oregon in 2003. Paterson's curse invades pastures, roadsides and disturbed areas. This adaptable plant will grow under a wide range of environmental conditions, is drought tolerant, and can germinate year round, if conditions are favorable. Each plant produces large quantities of seed (up to 5000 seeds per plant), which can last up to at least 6 years in the soil. Seeds are dispersed by water, by clinging to the hair of animals and by movement of contaminated soil and animal feed. Seed can also pass through the digestive system of animals unharmed. The plant is poisonous to livestock, causing liver damage, leading to a loss of condition in animals, and, in severe cases, death. Pigs and horses are most susceptible to poisoning, followed by cattle, while sheep and goats are much less susceptible. The hairs covering this plant can cause skin irritation in some people, and the pollen can cause allergic symptoms. In Australia, Paterson's curse has become resistant to some herbicides.

DESCRIPTION: Patterson's curse is an annual (sometimes a biennial) in the borage family. The plants usually germinate in late summer or early fall, producing a long taproot, and overwinter as a rosette of basal leaves. In the spring the plant produces erect, branched flowering stems, 8 inches to 3 feet tall. Basal leaves are oval or elongated in shape and 4 to 12 inches long, while stem leaves are smaller and narrow. Leaves and stems are covered with small stiff hairs. The $\frac{3}{4}$ to $1\frac{1}{4}$ inch long tubular flowers are usually bluish-purple in color, but may occasionally be white or pink. The flowers grow on one side of a curled flower stalk. Flowering occurs in spring but can occur throughout the growing season if ground disturbance allows for germination of new seeds. Plants die after flowering.

MANAGEMENT OPTIONS: Patterson's curse can be controlled using mechanical and chemical means. Cultivation will kill existing plants but may encourage germination of seeds. If plants are dug or cut, flowerheads should be destroyed as the seeds may still develop on the dead plant. Some biological control agents have been used in Australia, with some success. Contact the weed board for site-specific chemical recommendations.

