# common St. Johnswort
## *Hypericum perforatum* L.

Synonyms: *Hypericum perforatum* var. *confertiflorum* Debeaux, *H. perforatum* var. *microphyllum* H. Léveillé (1908), not Candolle (1815)
Other common names: Klamath weed, St. John's wort
Family: Clusiaceae (Hypericaceae)

**Invasiveness Rank:** 52 The invasiveness rank is calculated based on a species' ecological impacts, biological attributes, distribution, and response to control measures. The ranks are scaled from 0 to 100, with 0 representing a plant that poses no threat to native ecosystems and 100 representing a plant that poses a major threat to native ecosystems.

**Description**
Common St. Johnswort is a rhizomatous, perennial herb that grows 30 ½ to 91 cm tall. Stems are erect, glabrous, somewhat two-ridged, rust-colored, and woody at the base with numerous branches above. Leaves are opposite, sessile, entire, elliptic to oblong, about 2 ½ cm long, and glabrous. They have transparent spots throughout and black dots along the margins. Flowers are 19 mm in diameter, bright yellow, and numerous. They grow in flat-topped cymes. Each flower has five petals, which occasionally have minute black dots around the edges. Stamens are numerous and are arranged in three groups. Each flower has three styles. Seed pods are 6 mm long, rust-brown, and three-celled. Each seed pod contains numerous seeds (Lomer and Douglas 1998, Whitson et al. 2000).

*Hypericum perforatum* L. Photo by L. Landry.

*Similar species:* No native *Hypericum* species grow in Alaska (Hultén 1968, Welsh 1974).

**Ecological Impact**
*Impact on community composition, structure, and interactions*: In dense stands, common St. Johnswort displaces native plant species and reduces foraging sites for wildlife. Plants contain a toxin that causes severe dermatitis in light-haired livestock when exposed to strong sunlight (Powell et al. 1994, Rutledge and McLendon 1996, Whitson et al. 2000). Hybrids of common St. Johnswort and spotted St. Johnswort (*H. maculatum*) are common in Europe where both species grow (Campbell and Delfosse 1984, Lid and Lid 1994).
*Impact on ecosystem processes:* Common St. Johnswort depletes soil moisture. It likely delays the establishment of native species in disturbed sites. In late summer, the dry stalks of St. Johnswort may increase the risk of fires in forests and rangelands (Crompton et al. 1988).

**Biology and Invasive Potential**
*Reproductive potential:* Common St. Johnswort reproduces sexually by seeds and vegetatively by short rhizomes. The root systems spread horizontally and form new buds. Each plant can produce 15,000 to 30,000 seeds per year (Parsons 1957, Rutledge and McLendon 1996). Seeds can remain viable in the soil for 6 to 10 years (Clark 1953, Tisdale et al. 1959).
*Role of disturbance in establishment:* Original infestations are usually associated with logging, fire, mining, or other disturbances. Infestations spread further to naturally open forest stands. Vegetative propagation is usually stimulated when plants are grazed, mown, or burned (Tisdale et al. 1959).
*Potential for long-distance dispersal:* Seeds can be dispersed by wind, water, or animals (Rutledge and McLendon 1996). The gelatinous seed coats facilitate long-distance dispersal by sticking to moving objects or animals (Parsons 1957).
*Potential to be spread by human activity:* Common St. Johnswort has been introduced to new areas as an ornamental and medicinal herb (Parsons 1957). It has

been cultivated on farms in eastern Europe (Crompton et al. 1988, Gubanov et al. 2003). Seeds are distributed over large areas when they adhere to the wheels of vehicles or contaminate hay or soil (Parsons 1957).

*Germination requirements:* Seeds require 4 to 6 months following their maturation before they are able to germinate. They germinate best 12 months after maturation (Cambell 1985) when temperatures are between 21°C and 25°C. Seeds require bare soil, sunlight, and/or heavy rain to germinate successfully (Tisdale et al. 1959).

*Growth requirements:* Common St. Johnswort is well adapted to a wide variety of habitats and climatic conditions (Tisdale et al. 1959). It grows in dry, gravelly, or sandy soils with pH between 4.3 and 7.6 (Rutledge and McLendon 1996). The most vigorous infestations in Australia occur in areas with an annual rainfall of 760 mm or more (Cambell and Delfosse 1984).

*Congeneric weeds*: Sweet-amber (*Hypericum androsaemum*) is a very important weed in Australia (Parsons 1957).

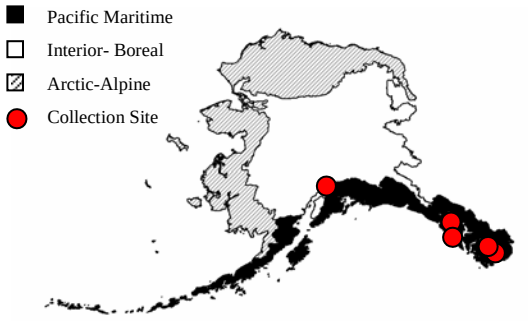
## Legal Listings

- ☐ Has not been declared noxious
- ☐ Listed noxious in Alaska
- ☒ Listed noxious by other states (CA, CO, MT, NV, OR, SD, WA, WY)
- ☐ Federal noxious weed
- ☒ Listed noxious in Canada or other countries (MB, QC)

## Distribution and abundance

Common St. Johnswort is commonly found along roadsides and in other disturbed areas. It also invades rangelands, pastures, and meadows (Parsons 1957, Powell et al. 1994, Guide to weeds in British Columbia 2002).

*Native and current distribution:* Common St. Johnswort is native to Europe, western Asia, and North Africa. It has naturalized in Asia, South Africa, North America, South America, and Australia (Parsons 1957, Powell et al. 1994, Guide to weeds in British Columbia 2002). This species has been documented from the Pacific Maritime ecogeographic region of Alaska (AKEPIC 2010).




Distribution of common St. Johnswort in Alaska.

## Management

Common St. Johnswort is difficult to control because of its extensive root system and long-lived seed banks. Tilling, hand pulling, mowing, and burning appear to be ineffective because vegetative reproduction is stimulated by mechanical treatment (Tisdale et al. 1959). Chemicals have been used to control common St. Johnswort, but the wax on its leaves can inhibit herbicide uptake. Several species of leaf-feeding beetles have proven relatively successful as biological control agents. However, these insects do not thrive in Canada or at high elevations (Campbell and Delfosse 1984, White et al. 1994, Rutledge and McLendon 1996).

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