

Knapweed Fact Sheet

Russian and Squarrose Knapweed

Asteraceae Family

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(c)John M Randall/The Nature Conservancy



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Russian knapweed (*Acroptilon repens*)

Squarrose knapweed (*Centaurea virgata*)

Distinguishing Features:

❶ Flowers:

- Russian knapweed: Flowers are pink or purple colored. Bracts have papery tips.
- Squarrose knapweed: Flowers are pink or purple colored. Spiny bracts having a long, recurved (backward pointing) terminal spine.

❷ **Seeds:** Seeds can remain viable up to eight years. Seeds below depths of one and a half inches will not germinate until the soil is disturbed.

❸ Leaves:

❹ **Roots:** Russian knapweed roots are easily recognizable by their black or dark brown color and small buds that develop into adventitious shoots, enabling the plant to spread rapidly, and form dense colonies.

❺ **Flowering Time:** June to October depending on species.

❻ Life cycle/ other:

- Russian knapweed: Long lived perennial spreading by creeping roots as well as seeds.
- Squarrose knapweed: Perennial.



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Impacts:

- Knapweeds are highly competitive plants that can exclude more desirable plants and form large, dense infestations.
- *Russian knapweed* contains an allelopathic compound which inhibits the growth of competing plants.
- Knapweed invasions cause losses averaging up to 63 percent of available grazing forage.

Russian knapweed plant (top) and new shoots emerging from the roots (below).

Control:

- The most effective method of control for Russian and squarrose knapweed is to prevent its establishment through proper land management.
- Russian knapweed does not establish readily in healthy, natural habitats.
- For small Russian knapweed sites with limited distribution, pull or dig up plants and remove as much root as possible so the plant will not re-sprout.
- The keys to controlling Russian knapweed are to 1) stress the weed and cause it to expend nutrient reserves in its root system, 2) eliminate new seed production, and 3) control its vegetative spread.
- Carefully monitor sites throughout the growing season to remove missed plants. Expect the level of control work to be intensive for the first several years due to seed banks and the soil disturbance that occurs when pulling or digging.
- Larger infestations can be treated with an appropriate herbicide for the site. Monitor the site throughout the growing season to catch any missed plants.
- Picloram (Tordon™) has been determined to be the most effective herbicide on Russian knapweed regardless of the time of application. (TNC Species Management Summary, 2005).
- Once the initial infestation has been controlled, native species should be replanted to act as a vegetative suppressant.
- Mowing alone is not recommended for control. Since the plant has the ability to flower below the mower height, mowing alone will not prevent seed production.



Top and Bottom photos by Steve Dewey, Utah State University, Bugwood.org

A Mormon cricket perches on a squarrose knapweed plant.



Squarrose knapweed in full bloom.



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