



Centaurea stoebe

Spotted knapweed

Why Observe?

Spotted knapweed is highly invasive and can severely decrease the biological diversity of native and agronomic habitats by reducing the availability of desirable forage for livestock operations, degrading wildlife habitats, and hindering reforestation and landscape restoration efforts. It also produces a chemical that is toxic to other plants, allowing it to spread quickly and become established. It can cause skin irritation for some, so observers should wear gloves, long sleeves and pants when handling this plant.

<https://www.mda.state.mn.us/plants/pestmanagement/weedcontrol/noxiouslist/spottedknapweed>

Tips for Identification

In the first year, basal leaves form a hairy rosette. In the second year, plants are from 8-48 inches tall and have branching stems with alternate leaves that are grayish, hoary, and divided into lance-shaped lobes. Flower bud bracts have dark, upside-down "V" markings that give them a spotted appearance. Its purple, pink or white flowers are tiny, with 25 to 40 flowers tightly clustered into flowerheads that appear as a single "flower" at the ends of the branches.

Be aware there is variation from individual to individual within a species, so your plant may not look exactly like the one pictured. If you are uncertain whether or not a phenophase is occurring, report a "?" for its status until it becomes clear what you are observing after subsequent visits.



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Initial growth

New growth of the plant is visible after a period of no growth (winter or drought), either from above-ground buds with green tips, or new green or white shoots breaking through the soil surface. Growth is considered "initial" on each bud or shoot until the first leaf has fully unfolded. For seedlings, "initial" growth includes the presence of the one or two small, round or elongated leaves (cotyledons) before the first true leaf has unfolded.

[Salicyna, via Wikimedia Commons CC BY-SA 4.0 \(cropped\)](#)



Leaves

One or more live, fully unfolded leaves are visible on the plant. For seedlings, consider only true leaves and do not count the one or two small, round or elongated leaves (cotyledons) that are found on the stem almost immediately after the seedling germinates. Do not include fully dried or dead leaves.

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Flowers or flower buds

One or more fresh open or unopened flowers or flower buds are visible on the plant. Include flower buds or inflorescences that are swelling or expanding, but do not include those that are tightly closed and not actively growing (dormant). Also do not include wilted or dried flowers.

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Open flowers

One or more open, fresh flowers are visible on the plant. Flowers are considered "open" when the reproductive parts (male stamens or female pistils) are visible between or within unfolded or open flower parts (petals, floral tubes or sepals). Do not include wilted or dried flowers.

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Fruits

One or more fruits are visible on the plant. For *Centaurea stoebe*, the fruit is very tiny and seed-like and is crowded into a spent flower head. The seed-like fruit changes from whitish-yellow or yellow-green to tan or brown and drops from the plant after the spent flower head reopens. Do not include flower heads that have already dropped all of their fruits. **Note:** *fruits are not visible in the photo but are assumed to be present in the spent flower head that has not yet reopened.*

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Ripe fruits

One or more ripe fruits are visible on the plant. For *Centaurea stoebe*, a fruit is considered ripe when it has turned tan or brown and readily drops from the reopened flower head when touched. Do not include empty flower heads that have already dropped all of their fruits.

Phenophases not pictured: Recent fruit or seed drop