



Camelthorn

Alhagi maurorum

FAMILY	Fabaceae- legumes	ORIGIN	Middle East
LIFE CYCLE	Perennial	OTHER NAMES	Persian manna, Caspian manna

QUICK FACTS

- Camelthorn is a thorny plant from the pea family that **aggressively competes** with native vegetation and crops, depleting soil nutrients and disrupting ecosystems, especially in arid regions.
- It thrives in various soil types, including moist and clay-rich soils, and can **spread rapidly** through both seeds and its deep, extensive root system, making it difficult to control.
- This weed's **sharp thorns** deter livestock from grazing, and its invasive nature poses significant challenges to farmers and ecosystems, including serving as a host for other invasive species like the **parasitic** cuscutha.



Tom Creswell, Purdue University, Bugwood.org

Above: Cuscutha infesting a camelthorn plant.

It's tough, it's prickly, and it's here to make life difficult for gardeners, farmers, and anyone who values a peaceful, weed-free existence.

Camelthorn, also known as Persian manna, is an invasive and noxious plant from the Fabaceae or pea family. It poses significant environmental and agricultural challenges in the Western regions of North America. Native to parts of the Middle East, Central Asia, and North Africa, this plant has spread widely in arid and semi-arid environments. Camelthorn has a deep root system and can thrive in harsh conditions. It aggressively competes with native vegetation and crops, depleting soil nutrients. It deters livestock from accessing healthy forage and spreads via the few animals that ingest it.

What does it look like?

Camelthorn is a slender undershrub that typically reaches an impressive height of 1 to 4 feet. Its stem and leaf surface can vary considerably; some plants display a smooth texture, while others have a delicate layer of fine hairs.



anetteffm, inaturalist.org



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Roots: Camelthorn has an extensive root system with a deep taproot penetrating 6-7 feet. Numerous lateral roots are rhizomatous.

Leaves: The leaves of camelthorn have entire margins and measure between 0.4 and 1 inch in length and 0.12 to 0.31 inches in width. Their shape is either obovate or elliptic-oblong, often with either a smooth or slightly fuzzy appearance. The petioles are short, around 2 millimeters in length, and the stipules, while present, are minuscule.

Flowers: Camelthorn has pea-like flower racemes that grow on the sides of the stems, which can be about half an inch to 2 inches long, often culminating in a sharp spine at the branch end. Each flower is supported by a slender pedicel that measures between approximately 0.04 and 0.12 inches and is usually accompanied by 1 to 2 tiny bracts. The outer part of the flower is smooth and hairless. It's about the size of a blueberry, measuring 0.08 to 0.1 inches. It has little pointed tips that create a triangular shape. The flower petals are brightly colored, ranging from about 0.24 to 0.35 inches long. They appear in beautiful shades of pink or reddish violet.

Seeds: The fruit of camelthorn is a pea-like pod, varying in length from 0.75 to 1.3 inches and measuring 0.08 to 0.12 inches in width. These pods have a visible constriction between the seeds, giving them an appearance that distinguishes them from other legumes. Between 1 and 9 seeds are nestled securely within each seed pod.

Impact and Management

Livestock

Camels are known to graze on camelthorn without reservation, enjoying this plant as a food source in desert climates. Other livestock steer clear of these plants, likely due to their sharp thorns. This invasive weed is incredibly hard to get rid of because it can regrow from even the smallest root fragments. As it grows, it develops rigid, sharp spines that keep livestock (excluding camels) from grazing on it, allowing it to dominate rangelands.

Health & Safety

The plant can physically injure children, workers, livestock, and wildlife, causing puncture wounds, skin irritation, or infections. The obstruction of firebreaks and pathways by large weed infestations can exacerbate fire risks in dry regions, threatening property and personal safety. The thorns can puncture bike and car tires, increasing the risk of human injury.

Ecosystem Health

Once established, camelthorn displaces native plants, resulting in a notable loss of floral and faunal biodiversity. This can significantly reduce forage availability for game, particularly during the winter months, and may even alter migratory patterns. Contributing to its obnoxious nature, camelthorn can host another invasive threat—the parasitic *cuscuta* species—adding another layer of difficulty to control efforts.

Infrastructure Threat

Camelthorn can penetrate up through asphalt pavement. This unique ability allows the plant to undermine the stability of paved areas such as roads, parking lots, sidewalks, and driveways, leading to costly repairs and maintenance, particularly in the southern regions of New Mexico, where the weed is more common.

Preventing camelthorn establishment is the most important factor for managing this weed. Manual methods, such as hand pulling or digging, can help control isolated populations, but this is only practical for sparse areas. Mechanical methods like tillage can stress root reserves when repeated over multiple seasons, though they may leave root fragments that lead to regrowth. Mowing or shredding is generally ineffective as camelthorn regrows rapidly after cutting. Prescribed fire is not recommended as it leaves the root crowns intact, and flooding may help control camelthorn in certain areas with natural basins. However, its application is limited to water reserves.

DO's

- Detect and remove small camelthorn populations as soon as they are identified to prevent the spread of the weed.
- Minimize soil disturbance and encourage revegetation with desirable native species to prevent camelthorn establishment.
- Use an integrated management approach combining manual, mechanical, cultural, and biological controls for greater effectiveness.

DON'Ts

- Use tilling as a single method as it can leave fragments that may lead to further infestations.
- Transport root fragments or seeds. Ensure vehicles and equipment are cleaned of soil or plant material after being in infested areas.
- Overlook small infestations as early-stage growth can lead to more widespread infestations.



For more information on managing camelthorn, please visit www.nmweeds.org

