

FACTS ABOUT WEEDS

The Bullies of the Plant World

Below are a few examples of the many unique characteristics of weeds.

The Fundamentals

- 1 Weeds muscle out crops and other desirable plants by **competing for water, nutrients, sunlight and space**. One example: A mature saltcedar (tamarisk) plant consumes **300 gallons of water a day**.
- 2 Many invasive weeds are non-native plants **introduced to North America from Europe and Asia**.
- 3 **More than two hundred weed species** have developed resistance to the herbicides used to control them.

The Impact on Crops and Natural Ecosystems



- 4 Weeds **cause more yield loss and add more to farmers' production costs** than insects, diseases, rodents, birds, deer and other grazers.
- 5 Weeds can promote **flooding during hurricanes** by jamming control pumps and blocking water flow.
- 6 Weeds such as cheatgrass or downy brome (*Bromus*

Tectorum) can pave the way for **rampant wildfires**.

- 7 Researchers at the University of Guelph confirm the significant impact of unchecked weeds on crops, including yield reductions of more than half for dry bean and corn crops.
- 8 More than **240 weed species** are reported to be "allelopathic," which means they can produce and release chemicals that inhibit growth of nearby plants.

The Impact on the Health of People and Animals

- 9 **Some weeds are poisonous**. Examples range from poison hemlock (*Conium maculatum*) to oleander (*Nerium oleander*).
- 10 **Some weeds cause allergies**. Common ragweed (*Ambrosia artemisiifolia*), for example, can release a billion pollen grains per plant from August through October, **triggering allergic reactions for nearly 36 million Americans annually**.
- 11 Increases in carbon dioxide in the atmosphere may be producing **bigger poison ivy plants** with a more toxic form of the oil that causes people to break out in a rash.
- 12 The leaves and stems of Giant hogweed (*Heracleum mantegazzianum*) can **create painful blisters and scars**.
- 13 Water lettuce (*Pistia stratiotes*) serves as a **breeding ground for mosquitoes**, which can carry diseases and threaten public health.
- 14 Common groundsel (*Senecio vulgaris*)—often found in alfalfa fields—contains highly toxic alkaloids that can **cause irreparable liver damage** if consumed by cattle, horses or sheep.
- 15 The invasive plant aquatic hydrilla (*Hydrilla verticillata*) is believed to have a **deadly impact on eagles and waterfowl**.



Weeds on the Move



16 Weed seeds can travel in unexpected ways. **They can stow away** on tires, bumpers, wheel wells or the underside of a vehicle. They can **hitch a ride with container-grown ornamentals** or travel the country in a package of **wild bird feed**.

17 Tiny seeds from horseweed (*Conyza canadensis*) have been known to travel 300 miles by air. Specially equipped model airplanes have tracked horseweed seed in the earth's **planetary boundary layer**.

Weeds Growing by Leaps and Bounds

18 Climate change may be fueling more aggressive weeds. Researchers have found that **the growth of poison ivy (*Toxicodendron radicans*) surges** by nearly 150 percent in carbon dioxide-rich environment.

19 Infestations of water hyacinth (*Eichhornia crassipes*) can **double in size weekly**.

20 A four-inch shoot hydrilla (*Hydrilla verticillata*) can grow by **3,200 inches in just 35 days**.

21 Invasive weeds are spreading at a rate of about **4,600 acres per day** on federal lands in the West.

Weeds Reproducing for Long-Term Survival

22 Weeds can be prolific seed producers. A single horseweed plant (*Conyza canadensis*) can **produce as many as 200,000 seeds**. A single lambsquarters plant (*Chenopodium album*) can **produce 72,000 seeds**. Seeds can **remain alive in the ground for 40 years**.

23 Each acre of U.S. cropland contains **50 million to 300 million buried weed seeds**. Five to 10 percent of them germinate and emerge each year.

24 A field of purple nutsedge plant (*Cyperus rotundus*) can produce tons of tubers and rhizomes per acre—fueling an army of new plants. **As many as 600 plants can be produced from a single tuber in a single year**.

Weeds That Are Edible

25 **Some weeds are edible**. Examples include borage (*Borago officinalis*), common purslane (*Portulaca oleracea*) and dandelion (*Taraxacum officinale*).

26 Small nutlets found at the tips of underground stems of yellow nutsedge (*Cyperus esculentus*) are edible and **taste like almonds**.

Odd Facts about Weeds

27 After a walk, Swiss engineer George de Mestral observed burs from common burdock (*Arctium minus*) stuck to his wool pants and his dog's fur. A few years later he patented **Velcro**, an invention inspired by the weed.

28 Scientists have discovered that **earthworms contribute to the spread of giant ragweed** by systematically collecting and burying its seeds in their burrows.

29 Cows that graze on garlic mustard (*Alliaria petiolata*) or other mustard weeds **produce milk with a garlic flavor**. Similarly, wild garlic (*Allium vineale*) can “flavor” wheat crops and reduce their market value. It's NOT the best way to make garlic bread!



30 Ancient Egyptians **wrapped their dead in the leaves of the giant reed (*Arundo donax*)**, now one of the worst riparian weeds in the U.S.

31 Scotch thistle (*Onopordum acanthium*) is said to have helped **win a battle**. Norsemen came ashore planning to surprise sleeping Scottish forces and removed their boots for a quieter assault. A prickly patch of thistle growing between the two armies is said to have saved the day and became the Scottish national flower.



www.wssa.net

*If you are viewing a printed copy of this document, visit www.wssa.net to view the references.