

WEEDOLOGY 101

THE HISTORY, SCIENCE, TECHNOLOGY & PHILOSOPHY OF WEEDING

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What is a weed and what is weeding?

“A weed is any plant in the wrong place,” and, essentially, “a weed is an especially aggressive plant that competes successfully against cultivated plants.”

Weeding is the removal of unwanted plants from the landscape or garden, anywhere it's unwanted.

Weeds are unwanted for a number of reasons. The main causes include:

- (a) They crowd out more desirable plants, limiting the sunlight reaching them, affecting their growth.
- (b) Some weeds spread 'pathogens' (colloquially: harmful germs), affecting the quality of the crop being grown.
- (c) Weeds with thorns make it difficult for a farmer to walk in their fields without protection
- (d) There are weeds which release chemicals that cause skin irritation.
- (e) Some of the time, weeds are not edible and can cause sickness if eaten.
- (f) Aesthetic reasons

What do weeds cost? And, who pays for it?

Residential – Commercial – Government - Public spaces/parks - Environment cost - Health cost

<http://myfwc.com/wildlifehabitats/invasive-plants/>
<http://myfwc.com/media/4137470/annualreport15-16.pdf>

- ▶ Almost 1 in every 7 introduced non-native species becomes invasive.
- ▶ **Floridians' Perceptions of Invasive Species**¹ (Nicole M. W. Dodds, Mary Hannah Miller, and Alexa J. Lamm²) <http://edis.ifas.ufl.edu/wc186>
- ▶ Damage, loss and control costs across US about \$120 billion each year. (Pimentel, Zuniga, and Morrison 2005)
- ▶ In Florida- over 1,180 non-native plant species have become established outside of human cultivation. (Florida Fish and Wildlife Conservation Commission[FWC] 2014; Schmitz 2002)
- ▶ Some of the most abundant, widespread, and harmful invasive species in Florida include citrus canker, Brazilian peppertree, melaleuca, hydrilla, Chinese tallowtree, cane toad, cogongrass, Japanese climbing fern, chinaberry, Burmese python, and water hyacinth. (University of Georgia 2014; Torrent 2011).

Types of Weeds

Invasive Non-native Species

Dayflower	Purple showers
Sanseveria	Surinam cherry
Brazilian Pepper	Shoebuttton ardisia
Carrotwood	

Weedy Native Species

Alba bidens	Wild Coffee
Frogfruit	Goldenrod
White plumbago	Gumbo limbo
Scorpion tail	

What Does Research Say About Weeds?

- ▶ A plant out of place...UF/IFAS [Gardening Solutions on Weeds](#)
- ▶ Farmer's Almanac <http://www.almanac.com/content/weed-control-techniques>
- ▶ Wikipedia <https://en.wikipedia.org/wiki/Weed>
- ▶ Weeds of Southern Turfgrasses [IFAS Books](#)

Weeditiquette: The Techniques and Tools of a Successful Weeder

- ▶ Eyes
- ▶ Hands, gloves
- ▶ Clippers
- ▶ Hoe and Rakes
- * Trowel
- * Spade
- * Weed whacker AND Edger
- * Disposal Container

Removal or Prevention Techniques

Natural methods: Hand pulling, using tools

Barriers: newspaper/cardboard, straw, mulch, fabric

Chemical weed control: many varieties both pre and post emergent

HAND WEEDING 101: Proper hand weeding techniques

- 1) To get the root out, hold the base, and pull.
- 2) Pull them when they are small - before they seed - or trim the seed heads (deadhead flowers).
- 3) Use an edger properly instead of a weed whacker, which isn't as effective, along edges of landscape beds.

Types of Weed Killer

Natural ingredients for weed killing

- ▶ Vinegar
- ▶ Boiling water
- ▶ Salt

Chemical methods

- * Round-Up
- * Pre-Emergent Granuals
- * Weed & Feed

Where do you put all those weeds you just pulled?

- ▶ Composting
- ▶ Yard trash bin
- ▶ Pathways

Weed Killer Recipe:

1 gallon of Vinegar (higher % = quicker results)

1 tbsp dish washing soap

2 cups Epsom Salts

The Zen of Weeding: Spiritual and meditative benefits of pulling weeds

- ▶ Mindful
- ▶ Plan weeding early or late in the day
- ▶ Ritualistic, practice the same routine over and over
- ▶ Keep It Simple!

Psychology: why don't we like to weed?

- ▶ -Time consuming
- ▶ -Lack of energy, knowledge
- ▶ -Hurts us physically
- * TOO HOT!
- * Fears of Unknow Bugs and Critters

For studies done on the benefits of weeding and gardening for psychological assistance and used as a therapy tool see American Horticulture Therapy Association at <http://www.ahta.org>

Practical Weeding Wisdom

- 1) ***Pull small weeds, seedling, up before they flower and disperse seeds.***
- 2) ***Deadhead or trim the plant back before it goes to seed.***
- 3) ***Pull weeds out by their roots.***
- 4) ***Gentle but firm pressure and patience will reward the weed puller.***
- 5) ***Know what kind of weeds you are removing so you use the right technique.***
- 6) ***There is no such thing as a weed free garden, just a weed controlled garden.***
- 7) ***Removing weeds by hand is always more effective than with chemicals.***
- 8) ***Reclassify weeding as therapy.***

For More Information About Weeds & Weeding:

- ▶ <http://michaelpollan.com/articles-archive/weeds-are-us/>
- ▶ <http://rcrec-ona.ifas.ufl.edu/weed-science/weed-id/index.shtml>
- ▶ [Florida Invasive Species Partnership](#)
- ▶ [USDA site](#)
- ▶ [Florida Fish and Wildlife Conservation Commission](#)

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