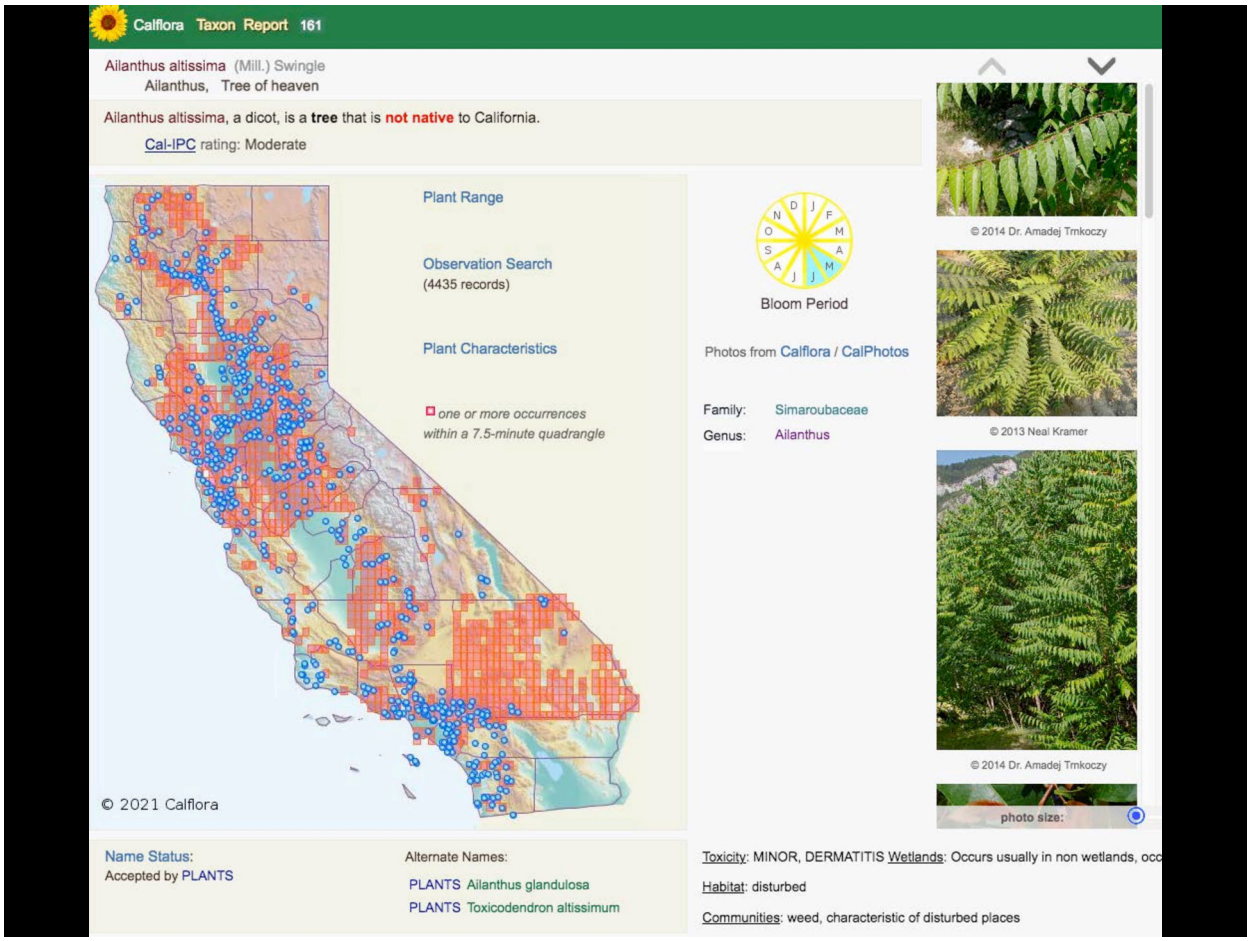
Ailanthus Control Methods

Ailanthus altissima

Common names in U.S.:

West Coast – (Chinese) Tree of Heaven

East Coast – Stink Tree



WIDESPREAD IN SOUTHERN CALIFORNIA & SIERRA NEVADA FOOTHILLS

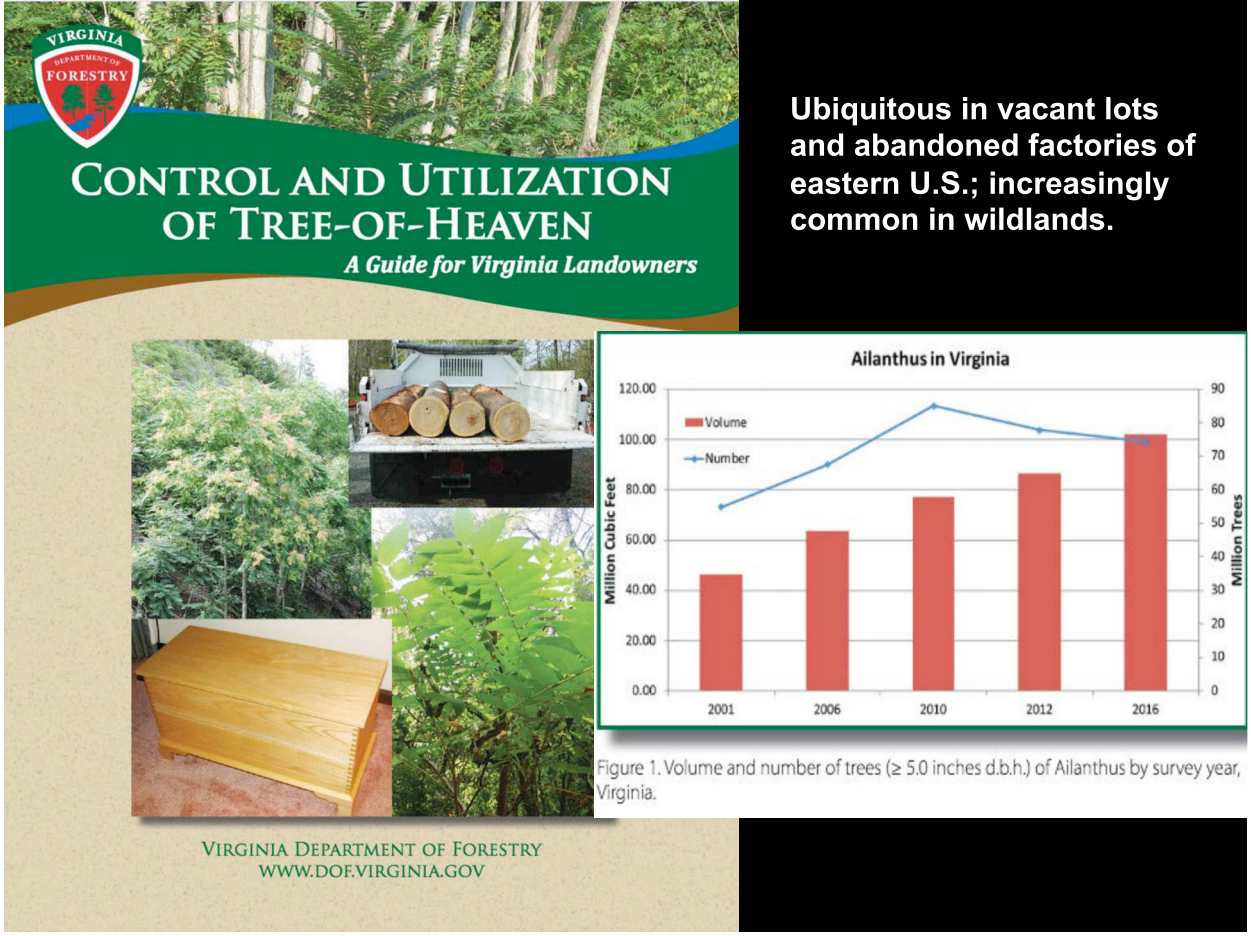
Natural Areas treated during past 20 years:

- Whittier Narrows – Army Corps Engineers
- Griffith Park – City of Los Angeles
- Montecito Heights – North East Trees
- Big Tujunga Canyon – Angeles N. Forest
- Mill Creek Canyon – Inland Empire RCD

Private yards treated during past 10 years:

- Mt. Washington/Pasadena –-- 75
- Calabasas/Agoura/Topanga – 15
- Lake Hughes/Leona Valley --- 18

Ailanthus flourishes in degraded soil where few other trees can survive; abundant on abandoned factory sites of eastern US.



How to recognize Ailanthus

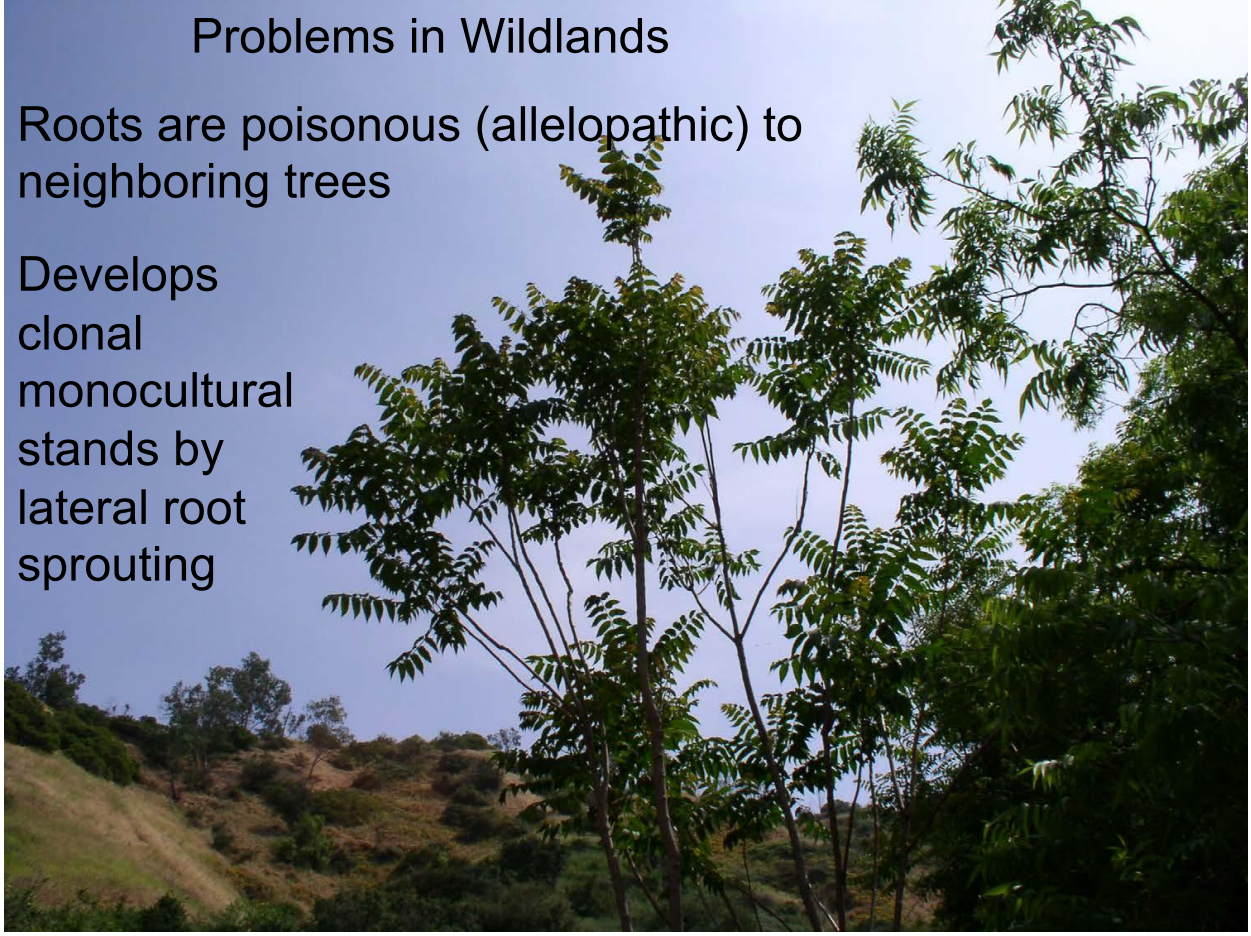
> Long pinnate compound leaves

>> Leaflets have notch at base

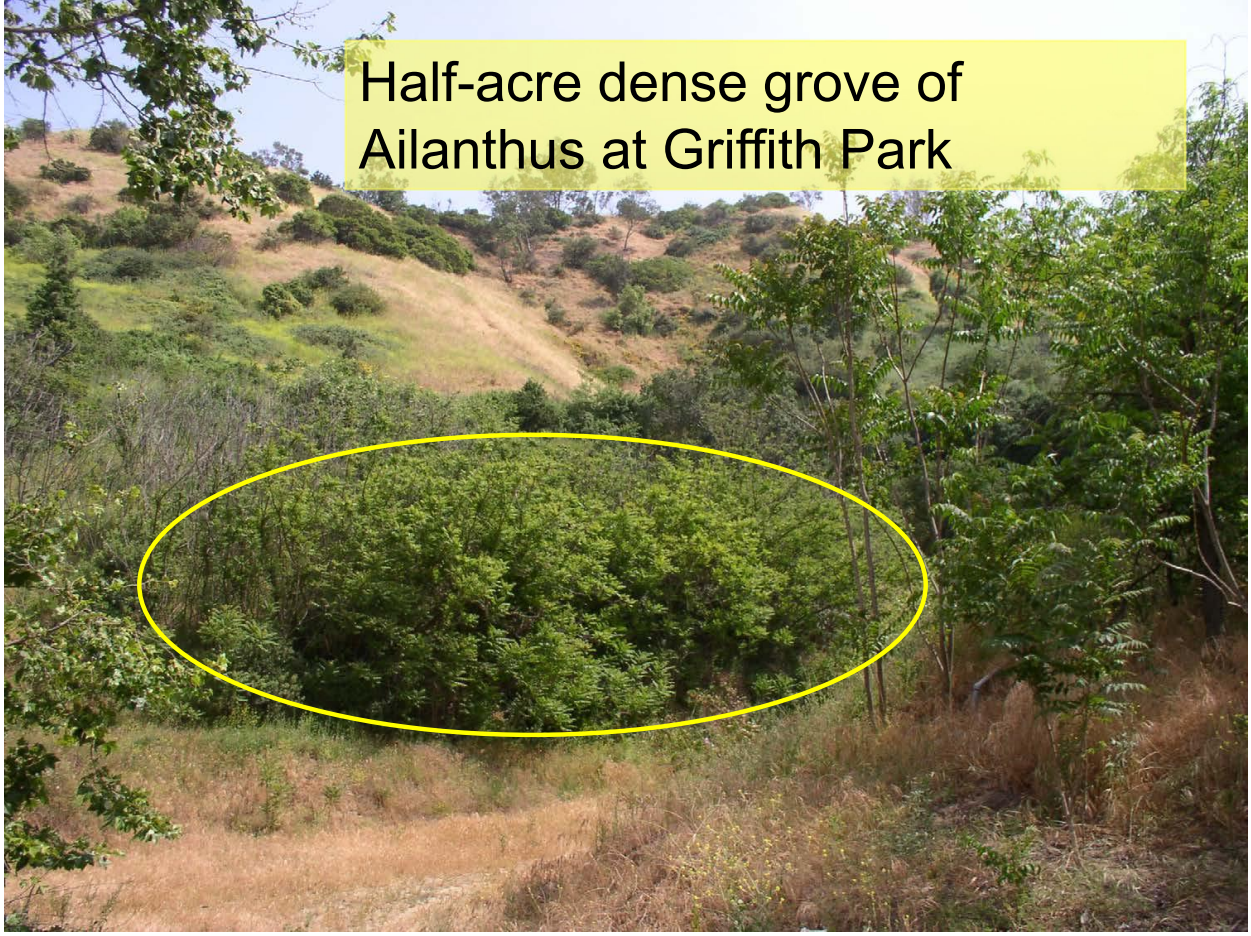
>>> Mottled yellow-gray bark

>>>> Foliage odor resembles male cat urine (Wikipedia) or rancid peanut butter

In Big Tujunga Canyon, basal bark application of Pathfinder II herbicide accentuates yellow-gray mottling of bark on 2-inch trunk



Large parent tree surrounded by saplings grown from lateral roots – outlier plants to left, possibly sprouted from seeds -- 6 weeks after herbicide treatment, in Santa Fe Dam basin of San Gabriel Valley



**Quarter-acre Ailanthus grove
on Glendora Ridge in San Gabriel Mountains,
4 weeks after herbicide treatment**

Upper: Ailanthus grove in Big Tujunga Canyon, sprouted after 2009 wildfire
Lower: Defoliated trees 7 weeks after basal bark herbicide application

AILANTHUS Control Considerations

> Felling or girdling trunks causes profuse root sprouting

> Has thin bark like castor bean, so saplings & juvenile trees are susceptible to basal bark application of Pathfinder II without cutting

> For large trunks, use hatchet to chop frill cuts in vertical rows, followed by basal bark treatment with Pathfinder II

> Imazapyr (BASF's Stalker & Habitat) effective for foliar spraying of saplings

Preferred Control Methods

Highly susceptible to triclopyr herbicide

→ Pathfinder II for basal bark

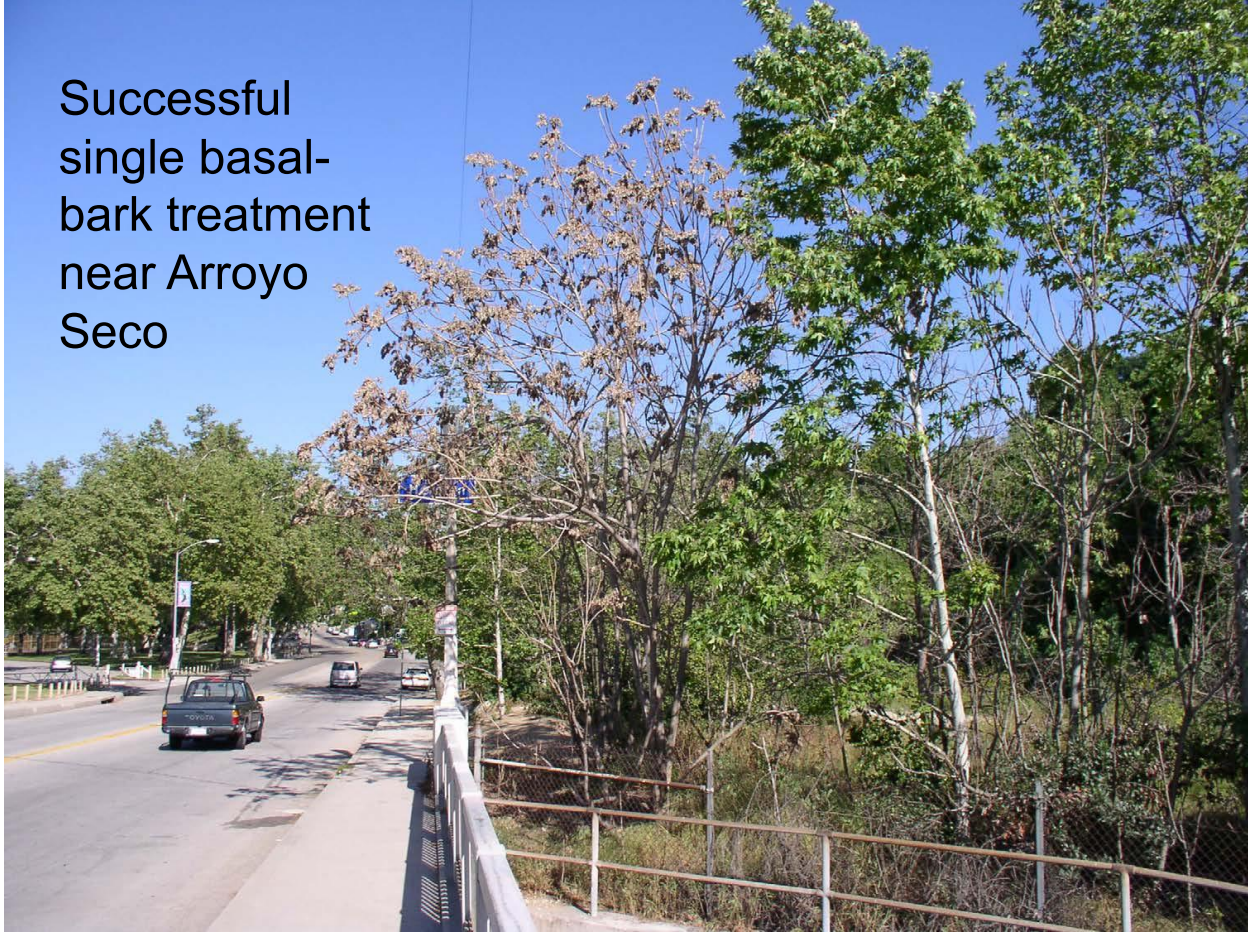
→ or 25% Garlon 4 in veg oil or diesel oil

Apply Pathfinder II herbicide using spray bottle with chemical-resistant trigger, available from janitorial supply stores.

Basal-bark treatment of large multi-trunk plants takes less than one minute

No cutting of bark required on largest trunks with diameters up to 16 inches

Unlike girdling, vertical columns of frill cuts by hand ax followed by basal bark application preserves fluid communication between tree crown and roots, thus avoiding massive sucker sprouting from lateral roots

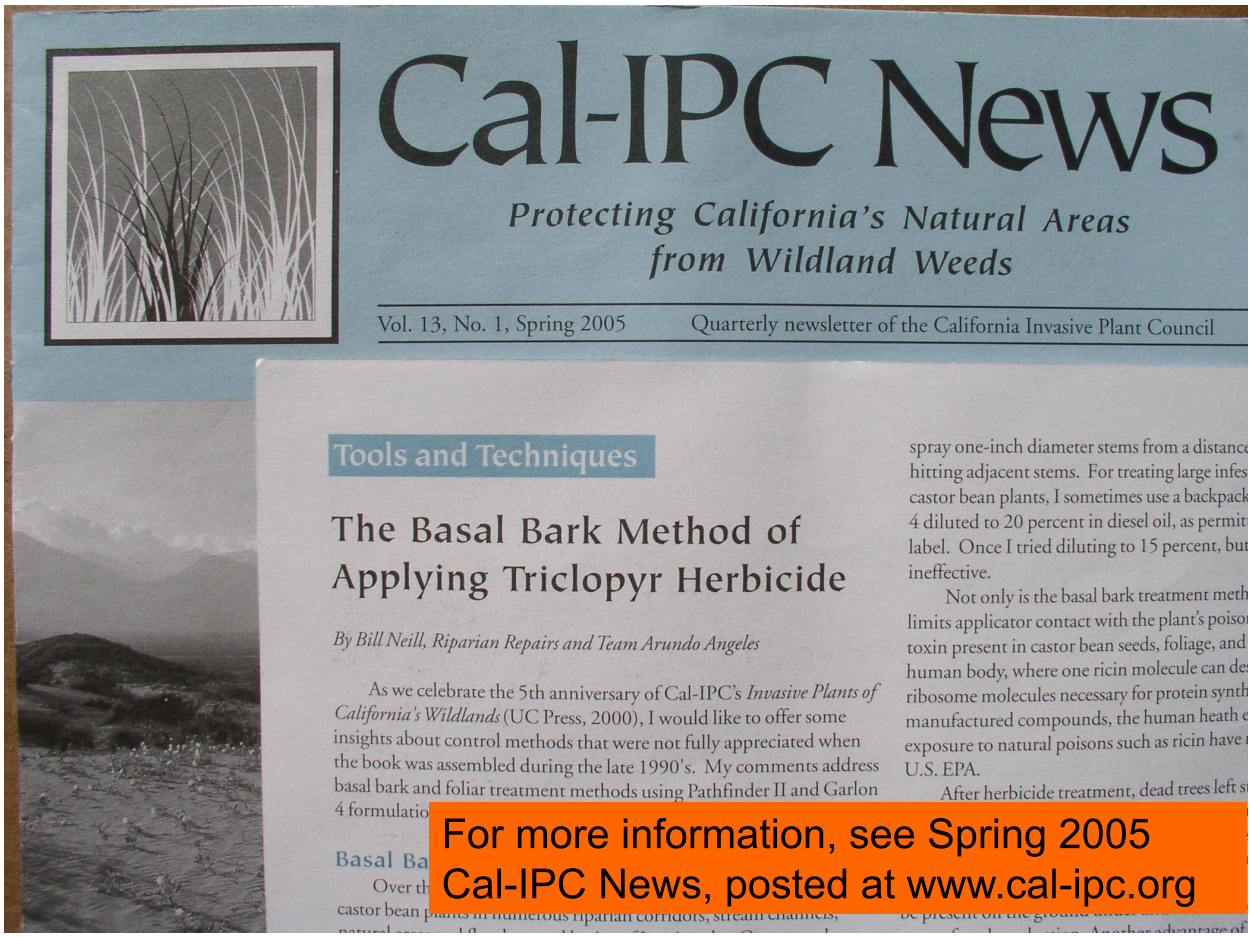

Successful single basal-bark treatment near Arroyo Seco


Successful single basal-bark treatment in Santa Ana Canyon

One-acre grove of Ailanthus trees in Montecito Heights (northeast of downtown Los Angeles) in July 2020, two weeks after basal bark application of Pathfinder II at top

One-acre Ailanthus grove in Montecito Heights, September 2020, 6 to 8 weeks after basal bark application of Pathfinder II; approx. 150 trunks treated in 4 hours with 1 gallon herbicide

One-acre grove of dead Ailanthus trees at Montecito Heights, July 2021, one year after basal bark herbicide treatment; foliage of few new stems sprayed with dilute imazapyr



Cal-IPC News

Protecting California's Natural Areas from Wildland Weeds

Vol. 13, No. 1, Spring 2005 Quarterly newsletter of the California Invasive Plant Council

Tools and Techniques

The Basal Bark Method of Applying Triclopyr Herbicide

By Bill Neill, Riparian Repairs and Team Arundo Angeles

As we celebrate the 5th anniversary of Cal-IPC's *Invasive Plants of California's Wildlands* (UC Press, 2000), I would like to offer some insights about control methods that were not fully appreciated when the book was assembled during the late 1990's. My comments address basal bark and foliar treatment methods using Pathfinder II and Garlon 4 formulatio

spray one-inch diameter stems from a distanc hitting adjacent stems. For treating large infes castor bean plants, I sometimes use a backpack 4 diluted to 20 percent in diesel oil, as permit label. Once I tried diluting to 15 percent, but ineffective.

Not only is the basal bark treatment meth limits applicator contact with the plant's poiso toxin present in castor bean seeds, foliage, and human body, where one ricin molecule can de ribosome molecules necessary for protein synth manufactured compounds, the human heath e exposure to natural poisons such as ricin have U.S. EPA.

After herbicide treatment, dead trees left s

Basal Ba

Over th

castor bean

For more information, see Spring 2005 Cal-IPC News, posted at www.cal-ipc.org

After wildfire, Ailanthus foliage grows rapidly from root crowns and lateral roots, here at Whittier Narrows. Fire followed by foliar spraying allows control of established groves relatively easily and cheaply.

One options: Spray post-fire foliage with 2.5% imazapyr herbicide (Habitat or Polaris) plus methylated seed oil to control regrowth effectively and easily.

Imazapyr is effective at translocating through long lateral roots, but slow-acting so foliage turns yellow and wilted about 4 to 6 weeks after application

About ten weeks after foliar spraying, Ailanthus foliage is mostly brown; resprouted Mexican elderberry behind behind dead foliage is thriving.

The preferred herbicide for Arundo control stops protein synthesis by plants, hence is inert to animal life.

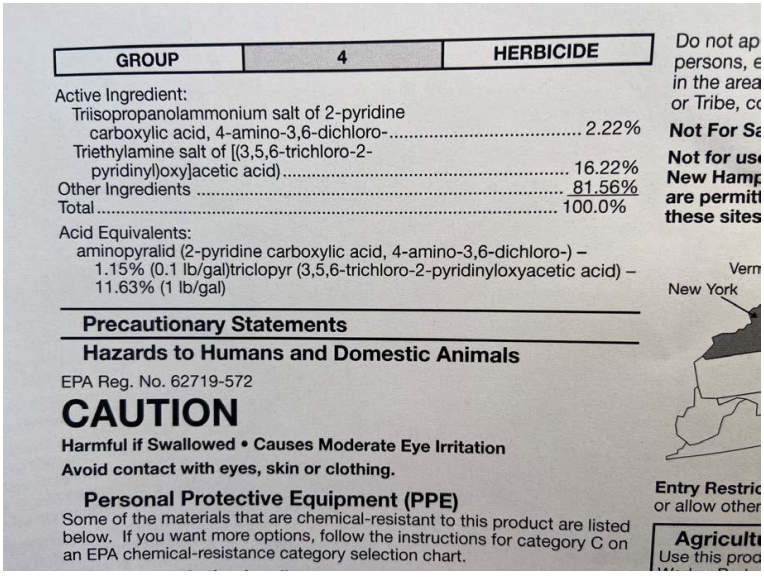
Habitat herbicide is registered for aquatic use, and livestock are allowed to drink treated water.

Recommended by Beau Miller, Corteva Agriscience:

Capstone®

HERBICIDE

- Excellent **grass safety**
- **Caution signal word**
- **Premix of Milestone + Garlon 3A**
- Broadcast use rates up to 9 pt/a or 9 qt/a max for spot treatments (50% acre limit)
- Not a Restricted Use Pesticide
- **Best Post Resistance Management Product on the market**
  - No grazing restrictions
- Packaging: 2.5's, 30's, bulk



GROUP	4	HERBICIDE

Active Ingredient:
Triisopropanolammonium salt of 2-pyridine carboxylic acid, 4-amino-3,6-dichloro- 2.22%
Triethylamine salt of [(3,5,6-trichloro-2-pyridinyl)oxy]acetic acid) 16.22%
Other Ingredients 81.56%
Total 100.0%

Acid Equivalents:
aminopyralid (2-pyridine carboxylic acid, 4-amino-3,6-dichloro-) – 1.15% (0.1 lb/gal)triclopyr (3,5,6-trichloro-2-pyridinyloxyacetic acid) – 11.63% (1 lb/gal)

Precautionary Statements

Hazards to Humans and Domestic Animals

EPA Reg. No. 62719-572

CAUTION

Harmful if Swallowed • Causes Moderate Eye Irritation
Avoid contact with eyes, skin or clothing.

Personal Protective Equipment (PPE)
Some of the materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical-resistance category selection chart.

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Capstone equivalent to
5% Milestone & 36% Garlon 3A

Tree of Heaven Demo in Visalia
Foliar treatment
9 pints of Capstone/acre

Beau Miller slide

Tree of Heaven Caltrans Demos
With Capstone 9 pts/acre or 5% v/vol

Capstone on Tree of Heaven 7 months after treatment

FREMONTIA, October 1998

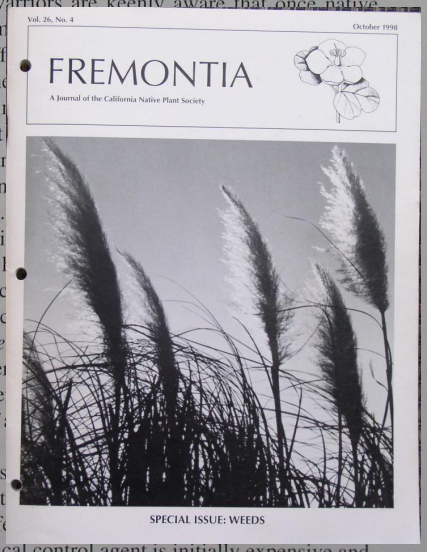
THE ROLE OF HERBICIDES IN PRESERVING BIODIVERSITY

by Jake Sigg

NO DATA EXIST for private land, but the Bureau of Land Management estimates that the United States is losing 6,000 acres of public land every day to invasive non-native plants (4,600 acres a day in the West alone), rendering land economically useless and biologically impoverished. In the frequently polarized debate over the use of herbicides in battling aggressive weeds, the subject of biodiversity is too often lost. Herbicides, per se, have become the focus of the debate. This is backwards—biological diversity should be front and center. This is the pivot on which CNPS policy must turn. Does proper use of herbicides work for or against biodiversity? Herbicide critics usually isolate the subject. They neglect the differences among herbicides and fail to address the serious weed problem confronting the California flora. I am a proponent of judicious use of herbicides, and favor their employment as a vital part of a weed management strategy.

Our discomfort with chemicals began with revelations in Rachel Carson's *Silent Spring* in the 1960s. The use of chemicals as a quick fix for complex problems created a backlash, resulting in a regulatory climate that protects the public against many of the dangerous substances used indiscriminately in the past. Herbicides became entangled in the reaction to chemicals, but evidence is skimpy re-

at those "who are unwilling to accept a short-term environmental insult to avoid a long-term ecological catastrophe." Weed warriors are keenly aware that once native



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oping a biological control agent is initially expensive and time-consuming, and there is no guarantee of success. Up

That's all, Folks!

Thank you!