# **Invasive Plant IPM (Integrated Pest Management)**

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## **Central ideas:**

- 1. Understands and uses biology and ecology of system.
- 2. Environmental/human health and safety are of great concern.
- 3. Do not necessarily have to use multiple treatment strategies, just the most safe and efficient method.

## More thoughts:

- 1. Usually utilize as many strategies to prevail against invasive plants.
- 2. On larger scale, even using herbicides becomes a very useful tool.
- 3. Control methods must look at plant seasonality, weather, and growth habit.
- 4. IPM originated for ag and urban use, now wildland weed operations are the last to use.
- 5. Efficiency is important: herbicide sometime most efficient and safe, depends on other feasible treatment options.
- 6. Must be able to justify treatments.
- 7. What method? Why? When? Where? All these questions come into play.
- 8. Consider sensitive ecosystems.
- 9. PPE for staff, and safely of park visitors is paramount.

### "Intelligent Persons Method"

- 1. Safety (no unnecessary harm done to people or planet)
- 2. Effectiveness (goal is reached)
- 3. Efficient (resources fully utilized)

### Manager tools and forums:

- 1. Go to <u>http://www.cal-ipc.org/resources/listservs.php</u> to sign up for the email lists.
- 2. <u>http://www.cdfa.ca.gov/plant/IPC/</u>
- 3. <u>http://www.ipm.ucdavis.edu/</u>
- 4. <u>http://wric.ucdavis.edu</u>

Herbicide Concerns:

- 1. Companies need to take into account wildland application.
- 2. Labels not written well, just what law requires.
- 3. In some areas they are vaguely written to protect the companies.
- 4. Pest Control Advisors may give different recommendations than land managers.

- 5. Still use herbicides because they are cheaper than most other methods. Can be very effective in some situations.
- 6. Need extremely well trained applicators.

Biocontrol

- 1. Often times, not the most effective, but can kill hard –to-find-plants.
- 2. In Australia, study says that for every \$1 spent, \$23 is saved.
- 3. Planning and testing of biocontrol takes enormous amount of time.