## **Early Detection Rapid Response**

If you're a land manager or landowner, your chances of **eradicating** or **controlling** an **invasive plant** are greatest immediately after a new species arrives on your property. **Early Detection Rapid Response (EDRR)** is an important method for managing **invasive species**, increasing the likelihood of successful eradication while keeping costs - including time and energy - down.

<u>Early detection</u>: Each year, look for new invasive species or populations on your property. Focus on areas with high ecological value - where impacts are likely to be most significant - as well as places where introductions are most likely:

- Access points
- Log landings
- Power lines
- Travel corridors
- Recently disturbed areas

<u>Rapid response</u>: When you find a new introduction or an isolated infestation of a species already established elsewhere on your property, make a systematic effort to eradicate, control or contain the infestation while it is still localized.

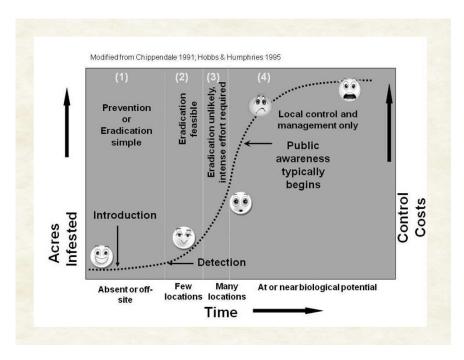
EDRR can apply to a species that is known to be in an area but is new to a particular property or a species that is not yet known to occur in Vermont.

## The costs of waiting

Often, people don't know **invasive plants** are problematic, so they innocently plant invasives and don't realize they're a problem until the populations are so large that they're hard to miss. Some non-plant **invasive species**, like **insects** or **fungi**, are so inconspicuous that populations go unnoticed for many years after introduction.

For example, Japanese knotweed has been a problem on Vermont's **rivers** for decades. But it is only now - after knotweed has covered miles of shoreline on every major **Vermont** river - that the general public is ringing the alarm bell.

The figure below illustrates this problem:



- During Phase 1 the introduction phase prevention and/or **eradication** is simpler. However, this is when populations typically are not detected.
- In Phase 2, population growth begins slowly but is enough for detection to become more likely.
- The population begins to grow quite rapidly even exponentially in Phase 3.
- Once into Phase 4, eradication becomes unlikely, if not unfeasible. However, this is typically when the problem is first recognized or when action is first taken.

In order to gain an advantage in controlling the species, you must take action during Phases 1 and 2, rather than waiting until Phases 3 and 4. Recognizing characteristics of invasives and taking action early in the invasion process will make control efforts more effective and less costly.

Check out the Vermont Invasive Exotic Plant Committee's Watch list to see some examples of EDRR species.

http://fpr.vermont.gov/forest/forest health/invasive plants

