**Invasive Plants and Weeds**

**Why Care? -** *The spread of noxious weeds:*

* *Signal the decline of entire ecological watersheds.*
* *Severely impact the beauty and biodiversity of natural areas and cause widespread economic losses.*
* *Problem for urban as well as rural areas, and for private, state, and federal lands.*
* *Noxious weed species spare no segment of society—rancher, farmer, fisher, and cycler alike*
* *Can’t leave well enough alone - when unmanaged, they spread rapidly, unceasingly, and silently*

**Exotic Invasive Species** *– more than just plants*

* plants
* animals
* microbes (fungi, bacteria, etc.)
* viruses (i.e., diseases)

Plant Terminology

* Native
* Introduced
* Invasive
* Weed

Native on Indigenous

* Originated where they now occur without the help of humans.
* For example, native to North America
* Well adapted to the local climate, soils, animals, and microbes.
* How long have they
been here?

Introduced, Exotic or Non-native

* An organism occurring outside of its natural home range
* Other names include alien, foreign, non-indigenous
* Introduced by humans
	+ Grains and food crops
	+ Seeds in Ship Ballast
	+ Ornamentals
	+ Plants for erosion control
	+ Plants with higher forage value
	+ Accidental

Invasive Species

**Invasive Species Website =** [**http://www.invasivespeciesinfo.gov/**](http://www.invasivespeciesinfo.gov/)

* An organism that spreads and establishes over large areas and persists
* Growth characteristics that allow it to dominate the ecosystem
* Often non-native (or alien) to the ecosystem
	+ Not all non-natives are invasive
* Whose introduction causes or is likely to cause economic or environmental harm or harm to human health.

Characteristics of Invasive Plants

* Abundant seed producers
* Rapid population establishment
* Long-term survival of seeds
* Occupy disturbed sites
* Competitive
* Lack of natural enemies

Weed

* Plant of little value or a plant “out of place”
* Competes with crops and native species
* Troublesome pest that affects the health an productivity of native landscapes
* “*a plant whose virtues have not yet been discovered*”... Ralph Waldo Emerson
* “*plants that interfere with the growth of desirable plants and that are unusually persistent and pernicious. They negatively impact human activities and as such are undesirable*” Ross & Lembi – Applied Weed Science. 1999

Impacts of Weeds

* Reducing biological diversity
* Altering hydrologic conditions
* Altering soil characteristics
* Altering fire intensity and frequency
* Interfering with natural succession
* Competing for native pollinators
* Replacing complex communities with monocultures
* Displacing rare plant species
* Noxious Weeds

**Noxious** = plant species that have been designated “noxious” by law.

* The word “noxious” simply means deleterious
* Weeds are declared noxious by states or counties.
* In Idaho, hundreds of weed species exist. However, only 36 are designated noxious by Idaho law.

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Weed Control Approaches

* Chemical –
* Mechanical –
* Biological –
* Cultural –