



RESOURCE BRIEF

Exotic Plants 2008

Importance

Exotic plants represent one of the most significant threats to natural resources in national parks. Exotic plants are a concern due to their abilities to reproduce prolifically, rapidly colonize new areas, displace native species, alter ecosystem processes across multiple scales, and detract from the interpretive value of park resources. In the Great Plains, grasslands have been increasingly degraded and fragmented, which results in increasing chances of exotic plant species invasion. There is often a time lag between the initial establishment of an invasive exotic and its rapid expansion toward local carrying capacity. Therefore, early detection and subsequent eradication is essential.

Status and Trends

The greatest variety of non-native plants are found along paved roads at FOUN. One New Mexico noxious weed, field bindweed (*Convolvulus arvensis*) exists on both paved and



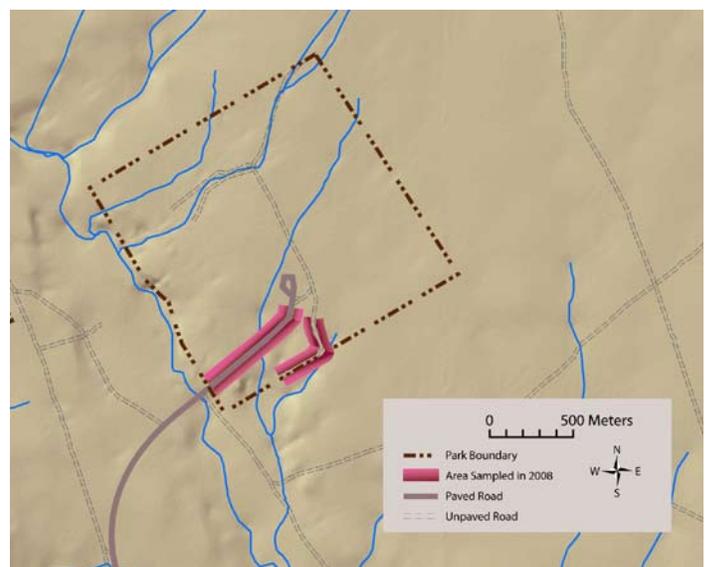
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Prickly Russian thistle (*Salsola tragus*)

unpaved roadways in varying densities. Prickly Russian thistle (*Salsola tragus*) is also established in all areas and spreading into the grasslands between the entrance road and staff housing. Additional species that should be closely monitored for expansion include mullein (*Verbascum thapsus*), Bermuda grass (*Cynodon dactylon*), salsify (*Tragopogon species*) and kochia (*Kochia scoparia*). Salsola was observed spreading from the unpaved roadside along the park boundary up to 20 meters into adjacent ranchland, while other species spread less than 10 meters off park property.

Table 1. Exotic plants observed during 2008 Exotic pilot study. A total of 40 vector blocks were sampled.

Scientific Name	Common Name	No. Blocks	% Blocks
<i>Salsola tragus</i>	Prickly Russian thistle	40	100%
<i>Euphorbia dentata</i>	Toothed spurge	38	95%
<i>Convolvulus arvensis</i>	Field Bindweed	37	93%
<i>Melilotus alba</i>	White sweetclover	24	60%
<i>Setaria viridis</i>	Green bristlegrass	21	53%
<i>Erodium cicutarium</i>	Stork's-bill	19	48%
<i>Panicum capillare</i>	Fall witchgrass	19	48%
<i>Sonchus asper</i>	Spiny sowthistle	17	43%
<i>Kochia scoparia</i>	Kochia	14	35%
Amaranth species	Pigweed	8	20%
<i>Cirsium</i> spp	Thistle	7	18%
<i>Verbascum thapsus</i>	Mullein	6	15%
<i>Lactuca serriola</i>	Prickly lettuce	5	13%
<i>Melilotus officinalis</i>	Yellow sweetclover	4	10%
<i>Setaria pumila</i>	Yellow bristlegrass	4	10%
<i>Bromus</i> spp	Brome	3	8%
<i>Eragrostis ciliaris</i>	Stinkgrass	3	8%
<i>Cynodon dactylon</i>	Bermuda grass	1	3%
<i>Malva neglecta</i>	Common mallow	1	3%
<i>Rumex</i> spp	Dock	1	3%
<i>Tragopogon</i> spp	Salisify	1	3%



Fort Union National Monument showing areas sampled for exotic plants during 2008.

