

Pine Rockland Restoration in South Florida

by Lauren Linares, Scheda Ecological Associates

There are hurricanes in Florida, and there are invasive plants. This year, the National Oceanic and Atmospheric Administration (NOAA) decided to tackle both.

NOAA implemented a plan to eradicate exotics at its 10-acre National Weather Service (NWS) radar facility in Miami-Dade County, where the main offender is Burma reed, *Neyraudia reynaudiana*. The project is especially important because the property is a pine rockland, a globally imperiled South Florida ecosystem (according to the Florida Natural Areas Inventory) of which 98% has been destroyed.



Burma reed in foreground with Doppler radar in background

“Management of invasive plants is a critical step in successful restoration of an infested pine rockland site,” says Chris Bergh, director of the Nature Conservancy Florida Keys Program, and chairman of the Pine Rockland Working Group. “In addition to competing directly with native plants, some invaders dramatically alter the fire regime of the infested site. By increasing fire fuel loads, species like Burma reed can create conditions that favor overly frequent and overly intense fires that negatively alter the makeup of the entire natural community.”

Scheda Ecological Associates (SEA) was contracted to restore the NWS site and was more than happy to take on the challenge. Justin Parsons, eradication crew foreman of Aquagenix, and I went



Project Manager Lauren Linares shows cautious Meteorologist-in-charge Rusty Pfost a tiny pine rockland endemic.

to work documenting the many listed and endemic pineland plants that needed protection during work activities.

Specially trained crew then began cutting Burma reed with machetes, and tying the grass into bundles for removal. The reed was allowed to partially regrow before crewmembers carefully applied herbicide using backpack sprayers. Exotic trees were chopped and immediately received a cut-stump herbicide treatment.

The federal government deserves kudos for recognizing the importance of this endeavor. I can't think of a better way to serve the environment than to knock out enemy plants while restoring a unique habitat that has almost disappeared.

The first round of the NOAA project is now complete. There will be follow-up treatments throughout the year, and documentation of the pineland plants that pop up their heads now that sunlight has reappeared. Coontie (*Zamia pumila*) was among the first plants to take advantage of the new sunlight after the tall Burma reed was cut.



Lauren Linares is a Senior Environmental Scientist at Scheda Ecological Associates in West Palm Beach, Florida. Contact her at LLinares@scheda.com or 561-689-9198.

National Weather Service Radar Facility 2005 PLANT SPECIES LIST

PINELAND PLANTS	COMMON NAME	LISTING	PINELAND PLANTS	COMMON NAME	LISTING
<i>Abrus precatorius</i>	Rosary pea	FLEPPC Cat. 1	<i>Metopium toxiferum</i>	Poisonwood	
<i>Acacia auriculiformis</i>	Earleaf acacia	FLEPPC Cat. 1	<i>Morinda royoc</i>	Cheeseshrub	
<i>Albizia lebbek</i>	Woman's tongue	FLEPPC Cat. 1	<i>Myrsine floridana</i>	Myrsine	
<i>Anemia adiantifolia</i>	Pine fern		<i>Nephrolepis</i> sp.	Sword fern	FLEPPC Cat. 1
<i>Angadenia berteroi</i>	Pineland allamanda	State threatened	<i>Neyraudia reynaudiana</i>	Burma reed	FLEPPC Cat. 1
<i>Byrsonima lucida</i>	Locustberry	State threatened	<i>Opuntia</i> sp.	Prickly-pear cactus	
<i>Callicarpa americana</i>	Beautyberry		<i>Pilobephis rigida</i>	Wild pennyroyal	
<i>Chamaecrista lineata</i> var. <i>keyensis</i>	Narrowpod Sensitive Pea	State endangered	<i>Pinus elliotii</i> var. <i>densa</i>	South Florida slash pine	
<i>Chamaesyce deltoidea</i> ssp. <i>deltoidea</i>	Deltoid spurge	U.S. endangered	<i>Piriqueta caroliniana</i>	Piriqueta	
<i>Chiococca parvifolia</i>	Snowberry		<i>Psidium longipes</i>	Long-stalked stopper	State threatened
<i>Cnidioscolus stimulosus</i>	Tread-softly		<i>Psychotria nervosa</i>	Wild coffee	
<i>Coccothrinax argentata</i>	Silver palm	State threatened	<i>Psychotria sulzneri</i>	Shortleaf wild coffee	
<i>Commelina erecta</i> var. <i>angustifolia</i>	Whitemouth dayflower		<i>Pteridium aquilinum</i>	Bracken fern	
<i>Crossopetalum ilicifolium</i>	Quailberry	State threatened	<i>Quercus pumila</i>	Running oak	
<i>Croton linearis</i>	Pineland croton		<i>Randia aculeata</i>	White indigoberry	
<i>Dichromena floridensis</i>	White-topped sedge		<i>Rhus copallina</i> var. <i>leucantha</i>	Southern sumac	
<i>Dyschoriste angusta</i>	Everglades twinflower		<i>Ruellia succulenta</i>	Wild petunia	
<i>Flaveria lineata</i>	Yellowtop		<i>Sabal palmetto</i>	Cabbage palm	
<i>Galactia pinetorum</i>	Pineland milk-pea		<i>Schefflera actinophylla</i>	Umbrella tree	FLEPPC Cat. 1
<i>Guettarda scabra</i>	Rough velvetseed		<i>Schinus terebinthifolius</i>	Brazilian pepper	FLEPPC Cat. 1
<i>Heliotropium polyphyllum</i>	Pineland heliotrope		<i>Serenoa repens</i>	Saw palmetto	
<i>Jacquemontia curtissii</i>	Pineland jacquemontia	State threatened	<i>Smilax</i> sp.	Greenbrier	
<i>Lantana camara</i>	Lantana	FLEPPC Cat. 1	<i>Stachytarpheta jamaicensis</i>	Blue porterweed	
<i>Lantana depressa</i> var. <i>depressa</i>	Shrub verbena	State endangered	<i>Stillingia sylvatica</i>	Queen's delight	
<i>Lantana involucrate</i>	Wild sage		<i>Tetrazygia bicolor</i>	Tetrazygia	State threatened
<i>Leucaena leucocephala</i>	Lead tree	FLEPPC Cat. 2	<i>Toxicodendron radicans</i>	Poison ivy	
<i>Liatris</i> sp.	Blazing star		Various Asteraceae		
<i>Licania michauxii</i>	Gopher-apple		<i>Zamia pumila</i>	Coontie	Comm. exploited
<i>Melanthera parvifolia</i>	Small-leaved melanthera	State threatened			