



Bosque Ecosystem Monitoring Program

Vegetation 2009

Each year the vegetation along the Rio Grande shifts depending on precipitation (timing and amount are both critical to the floristic response), groundwater, and human alteration of water and the bosque habitat. This report will point out some of the notable changes we observed in late summer 2009 while monitoring the 25 Bosque Ecosystem Monitoring Program vegetation plots between Lemitar, to the south, and Ohkay Owingeh, to the north. Recent reports focused on the impacts fire in the Belen area sites south of the bridge; these three sites, and the recently established Crawford Site, are changing in response to the fire and the recently implemented CFRP in this area. Channel construction, here and at the Harrison BEMP Site, have altered the vegetation plots within and adjacent to these newly created stream channels. Water flooded much of the Sevilleta Site this year leaving mud and/or standing water on many vegetation transects in September. Vegetation monitoring was delayed at the Sevilleta Site until the water receded and some of the mud dried in October. Mowing, fuel reduction, and exotic vegetation control/removal are some of the main activities impacting the bosque vegetation in the Albuquerque area. At Santo Domingo, as noted previously, horse grazing within the BEMP site had a direct impact on the vegetation present as well as our ability to identify grazed plants. The observations made within the BEMP-established plots captures some of the important fluctuations that occur up and down our main river in New Mexico.

One of the more interesting areas with regard to changing vegetation is the Belen area CFRP. As can be seen in **Photo 1** the Crawford Site is now separated into a post-burn cottonwood terrace (background) and a mechanically lowered area that floods periodically (foreground). There have already been large shifts in the vegetation that will be interesting to track over time. This picture shows the charred remains of the cottonwood canopy that recently characterized this site. In the foreground, fragrant flatsedge (*Cyperus odoratus*), previously unobserved within this site, along with cocklebur (*Xanthium strumarium*) are dominants in the sandy depression scoured out in early 2009. Other rapid colonizers in the loose sandy soils include: *Polypogon lapathifolium* (curlytop knotweed), *Digitaria sanguinalis* (hairy crabgrass), *Panicum dichotomiflorum* (fall panicgrass), *Leptochloa fusca* ssp. *fascicularis* (bearded sprangletop), *Eragrostis pectinacea* (spreading lovegrass) and somewhat more localized, *Orobanche ludoviciana* ssp. *ludoviciana* (Louisiana broomrape; **Photo 2**). Orobanche has not been previously recorded within any of the BEMP sites. It is a parasitic plant most commonly associated with a host in the sunflower family (Asteraceae). *Orobanche* erupted through the sandy soils of the Crawford site in early September. In addition to the rapid influx of new or expanding species, there has been a flush of long-lived perennial seedlings; coyote willow (*Salix exigua*), Rio Grande cottonwood (*Populus deltoides* ssp. *wislizeni*), Gooding willow (*Salix goodingii*) and salt cedar (*Tamarix chinensis*)[**Photo 3**]. These seedlings will compete within the site and data gathered from the BEMP transects will track the shifts due to competition and resource availability over time.



Photo 1. Crawford Site 2009. Foreground sedges contrast with the charred remains of the cottonwood canopy.



Photo 2. *Orobanche ludoviciana* ssp. *ludoviciana* (Louisiana broomrape).



Photo 3. Competition among long-lived perennial seedlings.

Plant diversity at the Crawford Site is almost certainly surpassed by the number of animals, primarily arthropods, which use this area. Animals come and go, often leaving tracks (**Photo 4**) or other evidence of their passing. We saw coyotes, many birds, and insect pollinators, but also were able to watch a grasshopper wasp (*Prionyx* sp.) stalk, kill, and bury a caterpillar to sustain its offspring (**Photos 5-14**). Adult grasshopper wasp females, like the one seen here, often prey on grasshoppers but we observed one collecting a caterpillar. After digging a burrow the wasp searched the area for prey and found the hapless caterpillar. She stung it and oviposited her eggs in the paralyzed body. She then dragged the body about 20 meters away, travelling almost directly to the tiny burrow with amazing precision. She crawled into the burrow and dragged in the caterpillar. She worked frenetically, kicking sand into the hole and occasionally stopping to search for a crusty lid for the burrow. Once the hole was filled she dragged the lid on top and paused momentarily before flying off. Her eggs will hatch and the larvae will feed on the caterpillar until they emerge to repeat the cycle.



Photo 4. Raccoon tracks in sand.



Photo 5. Woolybear caterpillar [larval form of a tiger moth(Noctuidae, Arctiinae)] found paralyzed at the Crawford Site. A grasshopper wasp stung it and oviposited her eggs within it.



Photo 6. Back for her prey.



Photo 7. She straddles her prey...



Photo 8. Ready for transport, she drags it off to a burrow she has prepared.



Photo 9. From within the burrow the wasp grabs hold...



Photo 10. ... and drags in the caterpillar.



Photo 11. With the body in place, she's ready to hide the paralyzed larva...



Photo 12. ...kicking sand to cover the burrow.



Photo 13. She breaks loose a nice cap of sand for her burrow...



Photo 14. ... and puts it in place. All sealed up, she departs.

While we've seen many changes throughout the BEMP sites from year to year we have tried to keep the identification of taxa constant. Part of this depends on having a voucher specimen for plants that are difficult to identify and/or plants that only occur within BEMP sites during abnormal years, e.g., following floods or exceptional precipitation. To date, we've collected 100s of plants for identification, some of them only fragments when a full specimen is unavailable. When we could only find only a fragment we searched the area carefully for a better specimen, but sometimes have to wait until the next field season to make a collection. Vouchering specimens gives a point of reference for BEMP staff or others interested in the flora of the Rio

Grande. Without a specimen you have little to back you up if there is a question about taxonomy. Names change over time and occasionally we make a mistake but the specimens are a useful tool in helping us catch such errors.

For a few years now I've called the *Xanthium* (cocklebur) with small spines *Xanthium spinosum* (XASP2) based on a split in a key. It turns out that we don't have *Xanthium spinosum* within any of our BEMP plots, but I wouldn't have known this without the UNM Herbarium, a large reference collection that we can check our BEMP identifications against to see if we were right. When I saw correctly identified specimens of *Xanthium spinosum*, and compared those to specimens collected within BEMP sites, it became clear to me that there was more variability within the spinescence of *Xanthium strumarium* fruits than was described in the original description I had read. We point this out primarily to illustrate the value of a reference collection but also so that BEMP staff can make a needed change in our records; all *Xanthium* should be identified as *Xanthium strumarium* (XAST). To date we have 331 complete specimens in the BEMP reference collection. Most of them are listed in the table below (duplicates have been removed from the list).

Symbol	Scientific Name	Common name/Accepted name(for synonyms)	Family	Native Status	Site
AGGI2	<i>Agrostis gigantea</i> Roth	redtop	Poaceae	L48 (I), AK (I), CAN (I), GL (I)	Ohkay Owingeh
AIAL	<i>Ailanthus altissima</i> (P. Mill.) Swingle	tree of heaven	Simaroubaceae	L48 (I), HI (I), CAN (I)	Los Lunas
ALTR7	<i>Alisma triviale</i> Pursh	northern water plantain	Alismataceae	L48 (N), AK (N), CAN (N)	Ohkay Owingeh
ALIN	<i>Allionia incarnata</i> L.	trailing windmills	Nyctaginaceae	L48 (N)	Lemitar
AMPA	<i>Amaranthus palmeri</i> S. Wats.	carelessweed	Amaranthaceae	L48 (N), CAN (I)	Crawford
AMAC2	<i>Ambrosia acanthicarpa</i> Hook.	flatspine burr ragweed	Asteraceae	L48 (N), CAN (N)	Montano
AMAR2	<i>Ambrosia artemisiifolia</i> L.	annual ragweed	Asteraceae	L48 (N), HI (I), CAN (N)	Calabacillas
AMCO3	<i>Ambrosia confertiflora</i> DC.	weakleaf burr ragweed	Asteraceae	L48 (N), PR (N)	Calabacillas
AMPS	<i>Ambrosia psilostachya</i> DC.	Cuman ragweed	Asteraceae	L48 (N), CAN (N)	Ohkay Owingeh
AMFR	<i>Amorpha fruticosa</i> L.	desert false indigo	Fabaceae	L48 (N), CAN (N)	Los Lunas
ANCA10	<i>Anemopsis californica</i> (Nutt.) Hook. & Arn.	yerba mansa	Saururaceae	L48 (N)	Belen
ANCA10	<i>Anemopsis californica</i> (Nutt.) Hook. & Arn.	yerba mansa	Saururaceae	L48 (N)	Los Lunas
APCA	<i>Apocynum cannabinum</i> L.	Indianhemp	Apocynaceae	L48 (N), CAN (N)	Los Lunas
APCA	<i>Apocynum cannabinum</i> L.	Indianhemp	Apocynaceae	L48 (N), CAN (N)	Ohkay Owingeh
ARAD	<i>Aristida adscensionis</i> L.	sixweeks threeawn	Poaceae	L48 (N), HI (I), PR (N), VI (N)	Lemitar
ARPU9	<i>Aristida purpurea</i> Nutt.	purple threeawn	Poaceae	L48 (N), CAN (N)	Nature Center
ARDR4	<i>Artemisia dracunculus</i> L.	tarragon	Asteraceae	L48 (N), AK (I?), CAN (N)	Diversion
ASSU2	<i>Asclepias subverticillata</i> (Gray) Vail	horsetail milkweed	Asclepiadaceae	L48 (N)	Belen
ASSU2	<i>Asclepias subverticillata</i> (Gray) Vail	horsetail milkweed	Asclepiadaceae	L48 (N)	Diversion
ASSU2	<i>Asclepias subverticillata</i> (Gray) Vail	horsetail milkweed	Asclepiadaceae	L48 (N)	Savannah
ATMI2	<i>Atriplex micrantha</i> Ledeb.	twoscale saltbush	Chenopodiaceae	L48 (I), CAN (I)	Ohkay Owingeh
BICE	<i>Bidens cernua</i> L.	nodding beggartick	Asteraceae	L48 (N), AK (N), CAN (N)	Harrison
BIFR	<i>Bidens frondosa</i> L.	devil's beggartick	Asteraceae	L48 (N), AK (I), CAN (I)	Harrison

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BIFR	<i>Bidens frondosa</i> L.	devil's beggartick	Asteraceae	L48 (N), AK (I), CAN (I)	Reynolds Cleared
BOBA2	<i>Bouteloua barbata</i> Lag.	sixweeks grama	Poaceae	L48 (N)	Bobcat
BOBA2	<i>Bouteloua barbata</i> Lag.	sixweeks grama	Poaceae	L48 (N)	Lemitar
BRAR5	<i>Bromus arvensis</i> L.	field brome	Poaceae	L48 (I), CAN (I)	Harrison
BRCA6	<i>Bromus catharticus</i> Vahl	rescuegrass	Poaceae	L48 (I), HI (I), CAN (I)	Hispanic Cultural Center
BROMU	<i>Bromus</i> L.	brome	Poaceae		Belen
BROMU	<i>Bromus</i> L.	brome	Poaceae		Ohkay Owingeh
CADR	<i>Cardaria draba</i> (L.) Desv.	whitetop	Brassicaceae	L48 (I), CAN (I)	Ohkay Owingeh
CAREX	<i>Carex</i> L.	sedge	Cyperaceae		Belen
CAREX	<i>Carex</i> L.	sedge	Cyperaceae		Ohkay Owingeh
CAREX	<i>Carex</i> L.	sedge	Cyperaceae		Sevilleta
CAPE42	<i>Carex pellita</i> Muhl. ex Willd.	woolly sedge	Cyperaceae	L48 (N), CAN (N)	Ohkay Owingeh
CASI12	<i>Carex siccata</i> Dewey	dryspike sedge	Cyperaceae	L48 (N), AK (N), CAN (N)	Ohkay Owingeh
CAUT	<i>Carex utriculata</i> Boott	Northwest Territory sedge	Cyperaceae	L48 (N), AK (N), CAN (N), SPM (N)	Ohkay Owingeh
CESP4	<i>Cenchrus spinifex</i> Cav.	coastal sandbur	Poaceae	L48 (N), PR (N), VI (N)	Harrison
CHGE2	<i>Chamaesyce geyeri</i> (Engelm. & Gray) Small	Geyer's sandmat	Euphorbiaceae	L48 (N), CAN (N)	Calabacillas
CHAMA15	<i>Chamaesyce</i> S.F. Gray	sandmat	Euphorbiaceae		Lemitar
CHFR3	<i>Chenopodium fremontii</i> S. Wats.	Fremont's goosefoot	Chenopodiaceae	L48 (N), CAN (N)	Badger
CHFR3	<i>Chenopodium fremontii</i> S. Wats.	Fremont's goosefoot	Chenopodiaceae	L48 (N), CAN (N)	Montano
CHIN2	<i>Chenopodium incanum</i> (S. Wats.) Heller	mealy goosefoot	Chenopodiaceae	L48 (N), CAN (N)	Crawford
CHENO	<i>Chenopodium</i> L.	goosefoot	Chenopodiaceae		Montano
CHENO	<i>Chenopodium</i> L.	goosefoot	Chenopodiaceae		Montano
CHENO	<i>Chenopodium</i> L.	goosefoot	Chenopodiaceae		Reynolds Cleared
CHENO	<i>Chenopodium</i> L.	goosefoot	Chenopodiaceae		Santo Domingo
CHPR5	<i>Chenopodium pratericola</i> Rydb.	desert goosefoot	Chenopodiaceae	L48 (N), AK (N), CAN (N)	Crawford
CHPR5	<i>Chenopodium pratericola</i> Rydb.	desert goosefoot	Chenopodiaceae	L48 (N), AK (N), CAN (N)	Montano
CHPR5	<i>Chenopodium pratericola</i> Rydb.	desert goosefoot	Chenopodiaceae	L48 (N), AK (N), CAN (N)	Santo Domingo

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CHSP11	<i>Chloracantha spinosa</i> (Benth.) Nesom	spiny chloracantha	Asteraceae	L48 (N)	Valencia Forest
CHVI8	<i>Chrysothamnus viscidiflorus</i> (Hook.) Nutt.	yellow rabbitbrush	Asteraceae	L48 (N), CAN (N)	Santo Domingo
CIAR4	<i>Cirsium arvense</i> (L.) Scop.	Canada thistle	Asteraceae	L48 (I), AK (I), CAN (I), GL (I), SPM (I)	Ohkay Owingeh
CLCO2	<i>Clematis columbiana</i> (Nutt.) Torr. & Gray	rock clematis	Ranunculaceae	L48 (N)	Diversion
CLCO2	<i>Clematis columbiana</i> (Nutt.) Torr. & Gray	rock clematis	Ranunculaceae	L48 (N)	Ohkay Owingeh
COAR4	<i>Convolvulus arvensis</i> L.	field bindweed	Convolvulaceae	L48 (I), HI (I), CAN (I)	Savannah
COCA5	<i>Conyza canadensis</i> (L.) Cronq.	Canadian horseweed	Asteraceae	L48 (N), AK (I?), HI (I), PR (N), VI (N), CAN (N), SPM (N)	Montano
COCA5	<i>Conyza canadensis</i> (L.) Cronq.	Canadian horseweed	Asteraceae	L48 (N), AK (I?), HI (I), PR (N), VI (N), CAN (N), SPM (N)	Savannah
CRTE4	<i>Croton texensis</i> (Klotzsch) Muell.-Arg.	Texas croton	Euphorbiaceae	L48 (N)	Calabacillas
CRTE4	<i>Croton texensis</i> (Klotzsch) Muell.-Arg.	Texas croton	Euphorbiaceae	L48 (N)	Montano
CRTE4	<i>Croton texensis</i> (Klotzsch) Muell.-Arg.	Texas croton	Euphorbiaceae	L48 (N)	Reynolds Cleared
CRTE4	<i>Croton texensis</i> (Klotzsch) Muell.-Arg.	Texas croton	Euphorbiaceae	L48 (N)	Rio Grande Nature Center
CYDA	<i>Cynodon dactylon</i> (L.) Pers.	Bermudagrass	Poaceae	L48 (I), HI (I), PR (I), VI (I), CAN (W), SPM (W)	Hispanic Cultural Center
CYES	<i>Cyperus esculentus</i> L.	yellow nutsedge	Cyperaceae	L48 (NI), AK (I), HI (I), PR (I), VI (I), CAN (I)	Bobcat
CYES	<i>Cyperus esculentus</i> L.	yellow nutsedge	Cyperaceae	L48 (NI), AK (I), HI (I), PR (I), VI (I), CAN (I)	Harrison
CYOD	<i>Cyperus odoratus</i> L.	fragrant flatsedge	Cyperaceae	L48 (N), HI (N), PR (N), VI (N), CAN (N)	Crawford
DALE3	<i>Dalea leporina</i> (Ait.) Bullock	foxtail prairie clover	Fabaceae	L48 (N)	Harrison
DALE3	<i>Dalea leporina</i> (Ait.) Bullock	foxtail prairie clover	Fabaceae	L48 (N)	Ohkay Owingeh
DAWR2	<i>Datura wrightii</i> Regel	sacred thorn-apple	Solanaceae	L48 (N), PR (N), VI (I)	Montano
DEIL	<i>Desmanthus illinoensis</i> (Michx.) MacM. ex B.L. Robins. & Fern.	Illinois bundleflower	Fabaceae	L48 (N)	Belen

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DISA	<i>Digitaria sanguinalis</i> (L.) Scop.	hairy crabgrass	Poaceae	L48 (N), PR (N), CAN (I)	Crawford
DISP	<i>Distichlis spicata</i> (L.) Greene	saltgrass	Poaceae	L48 (N), HI (I), CAN (N)	Belen
DISP	<i>Distichlis spicata</i> (L.) Greene	saltgrass	Poaceae	L48 (N), HI (I), CAN (N)	Ohkay Owingeh
DISP	<i>Distichlis spicata</i> (L.) Greene	saltgrass	Poaceae	L48 (N), HI (I), CAN (N)	Sevilleta
ECHIN4	<i>Echinochloa Beauv.</i>	cockspur grass	Poaceae		Crawford
ECHIN4	<i>Echinochloa Beauv.</i>	cockspur grass	Poaceae		Reynolds Cleared
ECCR	<i>Echinochloa crus-galli</i> (L.) Beauv.	barnyardgrass	Poaceae	L48 (I), HI (I), PR (I), CAN (W), SPM (W)	Ohkay Owingeh
ECMUM	<i>Echinochloa muricata</i> (Beauv.) Fern. var. <i>microstachya</i> Wieg.	rough barnyardgrass	Poaceae	L48 (N), VI (I), CAN (N)	Crawford
ECMUM	<i>Echinochloa muricata</i> (Beauv.) Fern. var. <i>microstachya</i> Wieg.	rough barnyardgrass	Poaceae	L48 (N), VI (I), CAN (N)	Harrison
ECMUM	<i>Echinochloa muricata</i> (Beauv.) Fern. var. <i>microstachya</i> Wieg.	rough barnyardgrass	Poaceae	L48 (N), VI (I), CAN (N)	Hispanic Cultural Center
ELAN	<i>Elaeagnus angustifolia</i> L.	Russian olive	Elaeagnaceae	L48 (I), CAN (I)	Los Lunas
ELAN	<i>Elaeagnus angustifolia</i> L.	Russian olive	Elaeagnaceae	L48 (I), CAN (I)	Savannah
ELCA4	<i>Elymus canadensis</i> L.	Canada wildrye	Poaceae	L48 (N), CAN (N)	Ohkay Owingeh
ELEL5	<i>Elymus elymoides</i> (Raf.) Swezey	squirreltail	Poaceae	L48 (N), CAN (N)	Minnow
ELEL5	<i>Elymus elymoides</i> (Raf.) Swezey	squirreltail	Poaceae	L48 (N), CAN (N)	Nature Center
ELTR7	<i>Elymus trachycaulus</i> (Link) Gould ex Shinners	slender wheatgrass	Poaceae	L48 (N), AK (N), CAN (N), GL (N), SPM (N)	Harrison
ELTR7	<i>Elymus trachycaulus</i> (Link) Gould ex Shinners	slender wheatgrass	Poaceae	L48 (N), AK (N), CAN (N), GL (N), SPM (N)	Ohkay Owingeh
ELTR7	<i>Elymus trachycaulus</i> (Link) Gould ex Shinners	slender wheatgrass	Poaceae	L48 (N), AK (N), CAN (N), GL (N), SPM (N)	Sevilleta
EQLA	<i>Equisetum laevigatum</i> A. Braun	smooth horsetail	Equisetaceae	L48 (N), CAN (N)	Los Lunas
ERHY	<i>Eragrostis hypnoides</i> (Lam.) B.S.P.	teal lovegrass	Poaceae	L48 (N), PR (N), CAN (N)	Harrison
ERPE	<i>Eragrostis pectinacea</i> (Michx.) Nees ex Steud.	tufted lovegrass	Poaceae	L48 (N), HI (I), PR (N), VI (N), CAN (N)	Harrison

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ERPEM	<i>Eragrostis pectinacea</i> (Michx.) Nees ex Steud. var. <i>miserrima</i> (Fourn.) J. Reeder	desert lovegrass	Poaceae	L48 (N), PR (N), VI (N), CAN (N)	Crawford
ERIGE2	<i>Erigeron</i> L.	fleabane	Asteraceae		Alameda
EUPHO	<i>Euphorbia</i> L.	spurge	Euphorbiaceae		Ohkay Owingeh
EUOC4	<i>Euthamia occidentalis</i> Nutt.	western goldentop	Asteraceae	L48 (N), CAN (N)	Belen
FOPUP	<i>Forestiera pubescens</i> Nutt. var. <i>pubescens</i>	stretchberry	Oleaceae	L48 (N)	Alameda
FOPUP	<i>Forestiera pubescens</i> Nutt. var. <i>pubescens</i>	stretchberry	Oleaceae	L48 (N)	Los Lunas
FRVE	<i>Fragaria vesca</i> L.	woodland strawberry	Rosaceae	L48 (N), HI (I), CAN (N)	Diversion
GAMO5	<i>Gaura mollis</i> James	velvetweed	Onagraceae	L48 (N)	Belen
GAMO5	<i>Gaura mollis</i> James	velvetweed	Onagraceae	L48 (N)	Ohkay Owingeh
GLLE3	<i>Glycyrrhiza lepidota</i> Pursh	American licorice	Fabaceae	L48 (N), CAN (N)	Los Lunas
GLLE3	<i>Glycyrrhiza lepidota</i> Pursh	American licorice	Fabaceae	L48 (N), CAN (N)	Ohkay Owingeh
GRSQ	<i>Grindelia squarrosa</i> (Pursh) Dunal	curlycup gumweed	Asteraceae	L48 (N), CAN (N)	Harrison
GUSA2	<i>Gutierrezia sarothrae</i> (Pursh) Britt. & Rusby	broom snakeweed	Asteraceae	L48 (N), CAN (N)	Lemitar
GUSA2	<i>Gutierrezia sarothrae</i> (Pursh) Britt. & Rusby	broom snakeweed	Asteraceae	L48 (N), CAN (N)	Nature Center
HEAN3	<i>Helianthus annuus</i> L.	common sunflower	Asteraceae	L48 (N), AK (I), HI (I), PR (I), CAN (I), SPM (I)	Belen
HEAN3	<i>Helianthus annuus</i> L.	common sunflower	Asteraceae	L48 (N), AK (I), HI (I), PR (I), CAN (I), SPM (I)	Ohkay Owingeh
HEAN3	<i>Helianthus annuus</i> L.	common sunflower	Asteraceae	L48 (N), AK (I), HI (I), PR (I), CAN (I), SPM (I)	Savannah
HECI	<i>Helianthus ciliaris</i> DC.	Texas blueweed	Asteraceae	L48 (N)	Belen
HECI	<i>Helianthus ciliaris</i> DC.	Texas blueweed	Asteraceae	L48 (N)	Montano
HECI	<i>Helianthus ciliaris</i> DC.	Texas blueweed	Asteraceae	L48 (N)	Savannah
HEPE	<i>Helianthus petiolaris</i> Nutt.	prairie sunflower	Asteraceae	L48 (N), CAN (N)	Santo Domingo
HECU3	<i>Heliotropium curassavicum</i> L.	salt heliotrope	Boraginaceae	L48 (N), HI (N), PR (N), VI (N), CAN (N)	Reynolds Cleared
HOJU	<i>Hordeum jubatum</i> L.	foxtail barley	Poaceae	L48 (N), AK (N), CAN (N), SPM (N)	Lemitar
HOJU	<i>Hordeum jubatum</i> L.	foxtail barley	Poaceae	L48 (N), AK (N), CAN (N), SPM (N)	Valencia Cleared

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ISPL	<i>Isocoma pluriflora</i> (Torr. & Gray) Greene	southern goldenbush	Asteraceae	L48 (N)	Belen
JUARL	<i>Juncus arcticus</i> Willd. ssp. <i>littoralis</i> (Engelm.) Hultén	Baltic rush	Juncaceae	L48 (N), AK (N), CAN (N), SPM (N)	Ohkay Owingeh
JUTO	<i>Juncus torreyi</i> Coville	Torrey's rush	Juncaceae	L48 (N), CAN (N)	Ohkay Owingeh
LASE	<i>Lactuca serriola</i> L.	prickly lettuce	Asteraceae	L48 (I), HI (I), CAN (I)	Alameda
LASE	<i>Lactuca serriola</i> L.	prickly lettuce	Asteraceae	L48 (I), HI (I), CAN (I)	Reynolds Cleared
LATAP	<i>Lactuca tatarica</i> (L.) C.A. Mey. var. <i>pulchella</i> (Pursh) Breitung	blue lettuce	Asteraceae	L48 (N), AK (N), CAN (N)	Belen
LATAP	<i>Lactuca tatarica</i> (L.) C.A. Mey. var. <i>pulchella</i> (Pursh) Breitung	blue lettuce	Asteraceae	L48 (N), AK (N), CAN (N)	Los Lunas
LATAP	<i>Lactuca tatarica</i> (L.) C.A. Mey. var. <i>pulchella</i> (Pursh) Breitung	blue lettuce	Asteraceae	L48 (N), AK (N), CAN (N)	Ohkay Owingeh
LEOR	<i>Leersia oryzoides</i> (L.) Sw.	rice cutgrass	Poaceae	L48 (N), CAN (N)	Ohkay Owingeh
LELA2	<i>Lepidium latifolium</i> L.	broadleaved pepperweed	Brassicaceae	L48 (I), CAN (I)	Sevilleta
LEFUF	<i>Leptochloa fusca</i> (L.) Kunth ssp. <i>fascicularis</i> (Lam.) N. Snow	bearded sprangletop	Poaceae	L48 (N), PR (N), VI (N), CAN (I)	Crawford
LEFUF	<i>Leptochloa fusca</i> (L.) Kunth ssp. <i>fascicularis</i> (Lam.) N. Snow	bearded sprangletop	Poaceae	L48 (N), PR (N), VI (N), CAN (I)	Reynolds Cleared
LINAR	<i>Linaria</i> P. Mill.	toadflax	Scrophulariaceae		Rio Grande Nature Center
LYTO	<i>Lycium torreyi</i> Gray	Torrey wolfberry	Solanaceae	L48 (N)	Valencia Cleared
LYTO	<i>Lycium torreyi</i> Gray	Torrey wolfberry	Solanaceae	L48 (N)	Valencia Forest
MACA2	<i>Machaeranthera canescens</i> (Pursh) Gray	hoary tansyaster	Asteraceae	L48 (N), CAN (N)	Calabacillas
MACA2	<i>Machaeranthera canescens</i> (Pursh) Gray	hoary tansyaster	Asteraceae	L48 (N), CAN (N)	Savannah
MACA2	<i>Machaeranthera canescens</i> (Pursh) Gray	hoary tansyaster	Asteraceae	L48 (N), CAN (N)	Valencia
MEOF	<i>Melilotus officinalis</i> (L.) Lam.	yellow sweetclover	Fabaceae	L48 (I), AK (I), HI (I), PR (I), CAN (I), GL (I), SPM (I)	Nature Center

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MENTH	Mentha L.	mint	Lamiaceae		Belen
MOLLU	Mollugo L.	carpetweed	Molluginaceae		Lemitar
MOAL	Morus alba L.	white mulberry	Moraceae	L48 (I), HI (I), CAN (I)	Los Lunas
MUAS	Muhlenbergia asperifolia (Nees & Meyen ex Trin.) Parodi	scratchgrass	Poaceae	L48 (N), CAN (N)	Los Lunas
MUAS	Muhlenbergia asperifolia (Nees & Meyen ex Trin.) Parodi	scratchgrass	Poaceae	L48 (N), CAN (N)	Ohkay Owingeh
MUAS	Muhlenbergia asperifolia (Nees & Meyen ex Trin.) Parodi	scratchgrass	Poaceae	L48 (N), CAN (N)	Sevilleta
OEELH	Oenothera elata Kunth ssp. hirsutissima (Gray ex S. Wats.) W. Dietr.	Hooker's evening-primrose	Onagraceae	L48 (N)	Harrison
OENOT	Oenothera L.	evening-primrose	Onagraceae		Belen
OEPA	Oenothera pallida Lindl.	pale evening-primrose	Onagraceae	L48 (N), CAN (N)	Lemitar
PACA6	Panicum capillare L.	witchgrass	Poaceae	L48 (N), VI (N), CAN (N)	Hispanic Cultural Center
PACA6	Panicum capillare L.	witchgrass	Poaceae	L48 (N), VI (N), CAN (N)	Reynolds Cleared
PADI	Panicum dichotomiflorum Michx.	fall panicgrass	Poaceae	L48 (N), HI (I), PR (N), CAN (I)	Crawford
PAOB	Panicum obtusum Kunth	vine mesquite	Poaceae	L48 (N)	Nature Center
PAV12	Panicum virgatum L.	switchgrass	Poaceae	L48 (N), HI (I), CAN (N)	Ohkay Owingeh
PAV15	Parthenocissus vitacea (Knerr) A.S. Hitchc.	woodbine	Vitaceae	L48 (N)	Los Lunas
PASM	Pascopyrum smithii (Rydb.) A. Löve	western wheatgrass	Poaceae	L48 (N), AK (I?), CAN (N)	Minnow
PASE5	Paspalum setaceum Michx.	thin paspalum	Poaceae	L48 (N), PR (N), CAN (N)	Hispanic Cultural Center
PEAN	Pectis angustifolia Torr.	lemonscent	Asteraceae	L48 (N)	Calabacillas
PHAU7	Phragmites australis (Cav.) Trin. ex Steud.	common reed	Poaceae	L48 (N), HI (I), PR (N), CAN (N)	SEV
PHAU7	Phragmites australis (Cav.) Trin. ex Steud.	common reed	Poaceae	L48 (N), HI (I), PR (N), CAN (N)	Sevilleta
PHVI5	Physalis virginiana P. Mill.	Virginia groundcherry	Solanaceae	L48 (N), CAN (N)	Diversion
PHVI5	Physalis virginiana P. Mill.	Virginia groundcherry	Solanaceae	L48 (N), CAN (N)	Montano
PHVI5	Physalis virginiana P. Mill.	Virginia groundcherry	Solanaceae	L48 (N), CAN (N)	Reynolds Cleared

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PHVI5	<i>Physalis virginiana</i> P. Mill.	Virginia groundcherry	Solanaceae	L48 (N), CAN (N)	Savannah
PIOP	<i>Picradeniopsis oppositifolia</i> (Nutt.) Rydb. ex Britt.	oppositeleaf bahia	Asteraceae	L48 (N), CAN (I)	Calabacillas
POCO	<i>Poa compressa</i> L.	Canada bluegrass	Poaceae	L48 (I), AK (I), HI (I), CAN (I), SPM (I)	Ohkay Owingeh
POCO	<i>Poa compressa</i> L.	Canada bluegrass	Poaceae	L48 (I), AK (I), HI (I), CAN (I), SPM (I)	Santa Ana
POPR	<i>Poa pratensis</i> L.	Kentucky bluegrass	Poaceae	L48 (NI), AK (NI), HI (I), PR (I), CAN (NI), GL (N), SPM (I)	Harrison
POLA4	<i>Polygonum lapathifolium</i> L.	curlytop knotweed	Polygonaceae	L48 (N), AK (I), CAN (I), GL (I), SPM (I)	Crawford/Belen C
POLA4	<i>Polygonum lapathifolium</i> L.	curlytop knotweed	Polygonaceae	L48 (N), AK (I), CAN (I), GL (I), SPM (I)	Reynolds Cleared
POMO5	<i>Polypogon monspeliensis</i> (L.) Desf.	annual rabbitsfoot grass	Poaceae	L48 (I), AK (I), HI (I), CAN (I)	Harrison
POMO5	<i>Polypogon monspeliensis</i> (L.) Desf.	annual rabbitsfoot grass	Poaceae	L48 (I), AK (I), HI (I), CAN (I)	Ohkay Owingeh
PODEW	<i>Populus deltoides</i> Bartr. ex Marsh. ssp. <i>wislizeni</i> (S. Wats.) Eckenwalder	Rio Grande cottonwood	Salicaceae	L48 (N)	Los Lunas
POHA5	<i>Portulaca halimoides</i> L.	silkcotton purslane	Portulacaceae	L48 (N), PR (N), VI (N)	Lemitar
PORTU	<i>Portulaca</i> L.	purslane	Portulacaceae		Lemitar
PORTU	<i>Portulaca</i> L.	purslane	Portulacaceae		Reynolds Cleared
POPI3	<i>Portulaca pilosa</i> L.	kiss me quick	Portulacaceae	L48 (N), HI (I), PR (N), VI (I)	Lemitar
PRGL2	<i>Prosopis glandulosa</i> Torr.	honey mesquite	Fabaceae	L48 (N), HI (I), VI (I)	Sevilleta
PRPU	<i>Prosopis pubescens</i> Benth.	screwbean mesquite	Fabaceae	L48 (N)	Sevilleta
PYPA4	<i>Pyrrhopappus pauciflorus</i> (D. Don) DC.	smallflower desert-chicory	Asteraceae	L48 (N)	Belen
RATA	<i>Ratibida tagetes</i> (James) Barnh.	green prairie coneflower	Asteraceae	L48 (N)	Diversion
ROPS	<i>Robinia pseudoacacia</i> L.	black locust	Fabaceae	L48 (N), CAN (I)	Ohkay Owingeh
ROWO	<i>Rosa woodsii</i> Lindl.	Woods' rose	Rosaceae	L48 (N), AK (N), CAN (N)	Ohkay Owingeh

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RUMEX	Rumex L.	dock	Polygonaceae		Reynolds Cleared
SARA3	Saccharum ravennae (L.) L.	ravennagrass	Poaceae	L48 (I)	Minnow
SAGO	Salix gooddingii Ball	Goodding's willow	Salicaceae	L48 (N)	Los Lunas
SAGO	Salix gooddingii Ball	Goodding's willow	Salicaceae	L48 (N)	Valencia Forest
SALIX	Salix L.	willow	Salicaceae		Los Lunas
SCPH	Schedonorus phoenix (Scop.) Holub	tall fescue	Poaceae	L48 (I), AK (I), HI (I), CAN (I), SPM (I)	Harrison
SCAR	Schismus arabicus Nees	Arabian schismus	Poaceae	L48 (I)	Hispanic Cultural Center
SCHOE6	Schoenoplectus (Reichenb.) Palla	bulrush	Cyperaceae		Ohkay Owingeh
SCACO2	Schoenoplectus acutus (Muhl. ex Bigelow) A. & D. Löve var. occidentalis (S. Wats.) S.G. Sm.	tule	Cyperaceae	L48 (N), CAN (N)	Ohkay Owingeh
SCAM6	Schoenoplectus americanus (Pers.) Volk. ex Schinz & R. Keller	chairmaker's bulrush	Cyperaceae	L48 (N), AK (N), PR (N), CAN (N)	Ohkay Owingeh
SCMA8	Schoenoplectus maritimus (L.) Lye	cosmopolitan bulrush	Cyperaceae	L48 (N), AK (N), HI (N), CAN (N), SPM (N)	Ohkay Owingeh
SCPU10	Schoenoplectus pungens (Vahl) Palla	common threesquare	Cyperaceae	L48 (N), PR (N), CAN (N), SPM (N)	Ohkay Owingeh
SCPU10	Schoenoplectus pungens (Vahl) Palla	common threesquare	Cyperaceae	L48 (N), PR (N), CAN (N), SPM (N)	SEV
SCTA2	Schoenoplectus tabernaemontani (K.C. Gmel.) Palla	softstem bulrush	Cyperaceae	L48 (N), AK (N), HI (N), PR (N), CAN (N), SPM (N)	Ohkay Owingeh
SCPA8	Scirpus pallidus (Britt.) Fern.	cloaked bulrush	Cyperaceae	L48 (N), CAN (N)	Ohkay Owingeh
SCPA8	Scirpus pallidus (Britt.) Fern.	cloaked bulrush	Cyperaceae	L48 (N), CAN (N)	Ohkay Owingeh
SENEC	Senecio L.	ragwort	Asteraceae		Reynolds Cleared
SELE6	Setaria leucopila (Scribn. & Merr.) K. Schum.	streambed bristlegrass	Poaceae	L48 (N)	Savannah
SEVI4	Setaria viridis (L.) Beauv.	green bristlegrass	Poaceae	L48 (I), CAN (I)	Crawford
SEVI4	Setaria viridis (L.) Beauv.	green bristlegrass	Poaceae	L48 (I), CAN (I)	Savannah

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SIIR	<i>Sisymbrium irio</i> L.	London rocket	Brassicaceae	L48 (I), HI (I)	Calabacillas
SOEL	<i>Solanum elaeagnifolium</i> Cav.	silverleaf nightshade	Solanaceae	L48 (N), HI (I), PR (N)	Montano
SOEL	<i>Solanum elaeagnifolium</i> Cav.	silverleaf nightshade	Solanaceae	L48 (N), HI (I), PR (N)	Savannah
SOLAN	<i>Solanum</i> L.	nightshade	Solanaceae		Montano
SOLAN	<i>Solanum</i> L.	nightshade	Solanaceae		Reynolds Cleared
SOTR	<i>Solanum triflorum</i> Nutt.	cutleaf nightshade	Solanaceae	L48 (N), CAN (I)	Montano
SOCA6	<i>Solidago canadensis</i> L.	Canada goldenrod	Asteraceae	L48 (N), AK (N), CAN (N)	Diversion
SOCA6	<i>Solidago canadensis</i> L.	Canada goldenrod	Asteraceae	L48 (N), AK (N), CAN (N)	Los Lunas
SOCA6	<i>Solidago canadensis</i> L.	Canada goldenrod	Asteraceae	L48 (N), AK (N), CAN (N)	Ohkay Owingeh
SONU2	<i>Sorghastrum nutans</i> (L.) Nash	Indiangrass	Poaceae	L48 (N), CAN (N)	Harrison
SPAN3	<i>Sphaeralcea angustifolia</i> (Cav.) G. Don	copper globemallow	Malvaceae	L48 (N)	Alameda
SPAN3	<i>Sphaeralcea angustifolia</i> (Cav.) G. Don	copper globemallow	Malvaceae	L48 (N)	Diversion
SPAN3	<i>Sphaeralcea angustifolia</i> (Cav.) G. Don	copper globemallow	Malvaceae	L48 (N)	Ohkay Owingeh
SPAN3	<i>Sphaeralcea angustifolia</i> (Cav.) G. Don	copper globemallow	Malvaceae	L48 (N)	Savannah
SPCO	<i>Sphaeralcea coccinea</i> (Nutt.) Rydb.	scarlet globemallow	Malvaceae	L48 (N), CAN (N)	Harrison
SPCO	<i>Sphaeralcea coccinea</i> (Nutt.) Rydb.	scarlet globemallow	Malvaceae	L48 (N), CAN (N)	Lemitar
SPCO	<i>Sphaeralcea coccinea</i> (Nutt.) Rydb.	scarlet globemallow	Malvaceae	L48 (N), CAN (N)	Nature Center
SPSA3	<i>Sphaerophysa salsula</i> (Pallas) DC.	alkali swainsonpea	Fabaceae	L48 (I), CAN (I)	Sevilleta
SPA1	<i>Sporobolus airoides</i> (Torr.) Torr.	alkali sacaton	Poaceae	L48 (N), CAN (N)	Nature Center
SPA1	<i>Sporobolus airoides</i> (Torr.) Torr.	alkali sacaton	Poaceae	L48 (N), CAN (N)	Savannah
SPCR	<i>Sporobolus cryptandrus</i> (Torr.) Gray	sand dropseed	Poaceae	L48 (N), CAN (N)	Lemitar
SPCR	<i>Sporobolus cryptandrus</i> (Torr.) Gray	sand dropseed	Poaceae	L48 (N), CAN (N)	Montano

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SPCR	<i>Sporobolus cryptandrus</i> (Torr.) Gray	sand dropseed	Poaceae	L48 (N), CAN (N)	Reynolds Cleared
SPFL2	<i>Sporobolus flexuosus</i> (Thurb. ex Vasey) Rydb.	mesa dropseed	Poaceae	L48 (N)	Lemitar
SPFL2	<i>Sporobolus flexuosus</i> (Thurb. ex Vasey) Rydb.	mesa dropseed	Poaceae	L48 (N)	Savannah
SPGI	<i>Sporobolus giganteus</i> Nash	giant dropseed	Poaceae	L48 (N)	Lemitar
SYER	<i>Symphyotrichum ericoides</i> (L.) Nesom	white heath aster	Asteraceae	L48 (N), CAN (N)	Belen
SYER	<i>Symphyotrichum ericoides</i> (L.) Nesom	white heath aster	Asteraceae	L48 (N), CAN (N)	Ohkay Owingeh
SYPR5	<i>Symphyotrichum praealtum</i> (Poir.) Nesom	willowleaf aster	Asteraceae	L48 (N), CAN (N)	Belen
SYPR5	<i>Symphyotrichum praealtum</i> (Poir.) Nesom	willowleaf aster	Asteraceae	L48 (N), CAN (N)	Ohkay Owingeh
TACH2	<i>Tamarix chinensis</i> Lour.	five-stamen tamarisk	Tamaricaceae	L48 (I)	Sevilleta
THIN6	<i>Thinopyrum intermedium</i> (Host) Barkworth & D.R. Dewey	intermediate wheatgrass	Poaceae	L48 (I), CAN (I)	Savannah
THPO7	<i>Thinopyrum ponticum</i> (Podp.) Z.-W. Liu & R.-C. Wang	tall wheatgrass	Poaceae	L48 (I), CAN (I)	Valencia Forest
TYLA	<i>Typha latifolia</i> L.	broadleaf cattail	Typhaceae	L48 (N), AK (N), HI (I), CAN (N)	Ohkay Owingeh
ULPU	<i>Ulmus pumila</i> L.	Siberian elm	Ulmaceae	L48 (I), CAN (I)	Los Lunas
VEBR	<i>Verbena bracteata</i> Cav. ex Lag. & Rodr.	bigbract verbena	Verbenaceae	L48 (N), CAN (N)	Minnow
XAST	<i>Xanthium strumarium</i> L.	rough cockleburr	Asteraceae	L48 (N), HI (I), PR (N), VI (N), CAN (N)	Harrison