# Seeds of Success for the Bureau of Land Management, Eugene District

### 2010 Annual Report



Matt Blakeley-Smith

**Institute for Applied Ecology** 

Funded by:

U.S.D.I. Bureau of Land Management, Eugene District and Institute for Applied Ecology, Corvallis, Oregon

#### **PREFACE**

This report is the result of a cooperative Challenge Cost Share project between the Institute for Applied Ecology (IAE) and a federal agency. IAE is a non-profit organization whose mission is conservation of native ecosystems through restoration, research and education. Our aim is to provide a service to public and private agencies and individuals by developing and communicating information on ecosystems, species, and effective management strategies and by conducting research, monitoring, and experiments. IAE offers educational opportunities through 3-4 month internships.

Questions regarding this report or IAE should be directed to:

Matt Blakeley-Smith Institute for Applied Ecology P.O. Box 2855 Corvallis, Oregon 97339 phone: 541-753-3099 x 503 fax: 541-753-3098

Internet: www.appliedeco.org

Please cite this report as:

Blakeley-Smith, M. 2010. Seeds of Success for the Bureau of Land Management, Eugene District. Institute for Applied Ecology, Corvallis, Oregon and USDI Bureau of Land Management, Eugene District.

Cover Photo: Photo of Anne Mary Myers collecting grass seed.

## **Contents**

Introduction	1
Collection Sites	1
Camp Creek Ridge / Gilkey Creek	1
Dorena Prairie	2
Eagle's Rest Sisyrinchium Site	2
McGowan Meadow	2
Mount Salem	3
Papenfus Prairie (Cloverdale)	3
Twin Prairie Butte	3
Sampling Strategy and Seed Collection Techniques	4
Seed Storage, Cleaning, and Distribution	4
Collection Reports	5
Literature Cited	5
ΓABLE 1. COLLECTION SITES	1
ΓABLE 2. LIST OF SEED COLLECTED AND ATTRIBUTES	
FIGURE 1. PHOTO OF WYETHIA ANGUSTIFOLIA AT MCGOWAN MEADOW	1

#### Introduction

During 2010 the Institute for Applied Ecology (IAE) worked in collaboration with the Bureau of Land Management (BLM), Eugene District to collect seed under the Seeds of Success program. Seeds of Success (SOS) is a national native seed collection program coordinated by the BLM. The goal of SOS is to provide wild collected seed for native plant materials development and research. In 2010 the Habitat Restoration Program for IAE made 17 SOS collections on seven prairies managed by the Eugene BLM. The Seeds of Success website provides the most up-to-date protocols and a wealth of other information (accessed at <a href="http://www.nps.gov/plants/sos/">http://www.nps.gov/plants/sos/</a>). We used the USDA PLANTS Database as our taxonomic standard (accessed at <a href="http://www.plants.usda.gov">http://www.plants.usda.gov</a>).



Figure 1. Photo of Wyethia angustifolia at McGowan Meadow.

### **Collection Sites**

IAE collected seed at seven locations in 2010 (Table 1). Driving directions and access notes are described in detail below.

Table 1. Collection sites, their corresponding GPS location and Township, Range and Section. We used the WGS84 GPS datum. All sites are on public land managed by the Eugene District BLM.

Site	Latitude	Longitude	T.R.S.
Camp Creek	44° 05' 06.84"	122° 53' 19.18"	T17S R2W Sec 13, 23
Dorena	43° 47' 10.75"	122° 57' 57.53"	T20S R2W Sec 32
Eagle's Rest	43° 51' 47.97"	122° 48' 02.53"	T20S R1W Sec 3
McGowan	44° 10' 35.46"	122° 59' 46.64"	T16S R3W Sec 13
Mt Salem	43° 55' 47.27"	122° 38' 47.82"	T19S R1E Sec 11
Papenfus	43° 54' 46.57"	122° 55' 31.44"	T19S R2W Sec 5
Twin Buttes	43° 41' 29.75"	123° 02' 11.96"	T22S R3W Sec3

### Camp Creek Ridge / Gilkey Creek

This site is slightly challenging since the main access requires you to cross private property. Dan Call lives on the property south of the BLM parcel, his phone # is 541-747-4261. In the past I have called Dan and parked in his driveway and walked ¼ mile to the BLM property. There is another property between Dan's and the BLM that is currently being developed, but there was no house there as of September 2011. I met the landowner one day and he was friendly, but since the access to the BLM property goes through his property access may change once he builds his house. I don't have contact

information for the landowner. In 2009 Ed Alverson of the Nature Conservancy wrote a site description for the BLM Eugene District in a report on the prairie, savanna, oak and pine potential ACECs. This report contains aerial photos and management suggestions. An invaluable comprehensive species list is included as a separate excel file.

To get to the site, take Highway 126 east to 42<sup>nd</sup> St. / Marcola exit. Turn left at the end of the off ramp and drive about a quarter mile to a stop sign. Turn right and drive for about half a mile and turn right onto Camp Creek Road and follow for 4.3 miles. Turn Left onto a gravel Road with a set-back red barn and three mailboxes # 37399, 37379, 37369. Drive up this gravel road for about a half mile and turn left into Dan Call's steep driveway # 37379. Drive up the long driveway and either park there after asking permission, or turn left on another steep gravel spur road just before the house and travel another 200 yards before the road deteriorates to packed dirt and rock. This site contains a number of disjunct prairies and the property boundaries are not marked. You will need aerial photos to find your way between the different prairies.

#### Dorena Prairie

This site is adjacent to Schwarz Park, Cottage Grove, OR.

Take I-5 South to Exit 174 Cottage Grove/Dorena Lake. Turn a left at the end of the ramp onto E Cottage Grove Con. This turns into Row River Rd. Follow for 4.0 miles and this road turns into Government Rd. / Shoreline Dr. Continue for an additional 0.5 miles and turn left into Schwarz Park (A US Army Corps of Engineers Camp ground and picnic site). The BLM parcel is the open meadow on the south side of the park, there are no signs marking the boundary. You may need to tell the camp ground host who you are and what you are doing. There is an additional prairie about 0.5 miles south of Dorena Prairie located at the intersection of Garoutte Rd. and Government Rd. No seed was collected at Garoutte Rd. in 2010, but a number of high value prairie species grow there. Row Point is another site managed by USACE with a significant stand of Roemer's fescue. In 2010 this site was used by USACE for seed collecting so IAE did not collect seed there.

### Eagle's Rest Sisyrinchium Site

There are two BLM prairie sites named Eagle's Rest. This site is known as the Eagle's Rest Sisyrinchium Site. Take Hwy 58 east and pass partway through the town of Dexter (just past milepost 11). Near the eastern edge of town turn right onto Lost Creek Rd (library sign). Follow this road for 3.8 miles and turn left on a sharp bend in the road onto Eagle's Rest Rd (19-1-33.1). Follow this paved road for 0.7 miles to a small parking area on the left (spur 19-1-3.1). From there use aerial photos or GPS coordinates to locate the small meadow which is about 300 meters south of the parking area. There is a flagged trail through the forest about 75 feet uphill of the parking area. The western edge of the meadow abuts private property which is marked by a decrepit fence. No locked gates or dirt roads were encountered in 2010.

#### McGowan Meadow

This site is located in the southwest section of the Coburg Hills. From I-5 head east on OR-126 towards Springfield and take the 42<sup>nd</sup> St / Marcola exit. At the end of the off-ramp turn left and drive to the first stop sign. Turn right onto Marcola Rd. and continue for 7.8 miles. Turn left onto Donna Rd. and set your odometer to zero (all mileage is referenced from this intersection). After 1 mile turn right onto

McGowan Rd. At mile 3.5 bear right onto paved BLM Rd # 16-2-27. At mile 5.1 stay left on Rd. # 16-2-27. The meadow appears mostly on the right-hand side at mile 6.4. The road is paved the entire way and no locked gates are present. An alternative turn-off from Marcola Rd. is Hill Rd and turn right at the general store.

#### Mount Salem

You will need an aerial photo and a compass to find this remote prairie.

Take Highway 58 East towards the town of Lowell. Turn Left on Pioneer Rd and cross Dexter Reservoir. Travel for about half a mile and turn left onto N Shore Dr. Continue for about 0.1 mile and turn Right onto S Moss St. Follow for about 0.8 miles and this road turns into Jasper Lowell Rd. Continue going straight for another 1.0 mile and turn right on Big Fall Creek Rd. Follow for 0.4 miles and turn right on Winberry Creek Rd. Follow this road for 4.4 miles and turn right to stay on Winberry Creek Rd. After 0.1 miles turn left on Horn Butte Rd (BLM Rd. # 19-1E-16). Make sure you don't take the road that goes back around the reservoir. Follow Horn Butte Rd (an obscure paved forest road) for 2.7 miles and look for a suitable parking spot. In order to reach the prairies from the road you will need to bush-whack uphill for about 45 minutes. If you climb too far to the left (north) you will get stuck in dense brush and dog-hair timber. Stay to the south and climb through the mature timber with dense salal and sword fern. It is possible to approach the prairie from the top if you get a private forest gate key from the BLM and travel on rough forest roads. In 2009 Ed Alverson of the Nature Conservancy wrote a site description for the BLM Eugene District in a report on the prairie, savanna, oak and pine potential ACECs. This report contains aerial photos and management suggestions. A comprehensive species list is included as a separate excel file.

### Papenfus Prairie (Cloverdale)

A <u>Weyerhaeuser key is required</u> to access this site. Take Hwy 58 east for 5.2 miles and pass through the town of Pleasant Hill. As you leave the town of Pleasant Hill look for Enterprise Rd which is right before the High School on Hwy 58. Turn right onto Enterprise Rd and continue for about 1.7 miles and bear left onto Papenfus Rd. Follow this road for 1.1 miles until the pavement ends. Drive 0.1 mile up a steep gravel road, stay left at the fork and pass a small house. Pass through a locked yellow gate (Weyerhaeuser key) and drive along a brushy road for 0.6 miles. Take the right fork and drive for another 0.8 miles, stay to the right and follow for another 0.3 miles. The meadow is to the south (left) and is visible from the road. In 2009 Ed Alverson of the Nature Conservancy wrote a site description for the BLM Eugene District in a report on the prairie, savanna, oak and pine potential ACECs. This report contains aerial photos and management suggestions for Papenfus Prairie. A comprehensive species list is included as a separate excel file.

#### Twin Prairie Butte

You will need a <u>BLM key</u>, aerial photo, and compass to find this site. Take I-5 to Cottage Grove and EXIT 172, "Cottage Grove Lake". Turn Left at the off-ramp traffic light and go approximately 6.5 miles to the south end of Cottage Grove Reservoir. Take a left onto Cottage Grove Reservoir Rd and go approximately 1.5 miles. Turn right on Wilson Creek road (county road 2719, the small # on the sign). Drive about a mile to the locked gate at the end of the pavement, use your BLM key to go through the gate. Just past the gate, stay on the main gravel road (do not take the right hand fork/turn).

Go past the quarry, and make the first left onto BLM Road #22-3-3.2 on the map but it is signed 22-3-3.1 on the road. Go up this road approximately .75 miles and make a left onto 22-3-2. Drive to the end of the road and park. Walk south through the woods, down the hill into the meadows. In 2009 Ed Alverson of the Nature Conservancy wrote a site description for the BLM Eugene District in a report on the prairie, savanna, oak and pine potential ACECs. This report contains aerial photos and management suggestions for Twin Prairie Butte. A comprehensive species list is included as a separate excel file.

### Sampling Strategy and Seed Collection Techniques

We used the Seeds of Success Protocol (BLM 2010) to guide our seed collection efforts. Our goal was to capture as much genetic diversity from a population as possible. Seed was only collected from a species if there were a minimum of fifty plants in the population. Typically we visited a site at least three times in the growing season. The first visit was used to map and mark plants for future collection, as well as gauge plant phenology. For species with a long seed maturation period, we visited the site multiple times to collect seed from individuals that were early, normal, or late to mature seed. Collection dates in Table 2 represent peak periods of seed production, but these dates will fluctuate year-to-year based on annual variations in temperature and precipitation.

### Seed Storage, Cleaning, and Distribution

Seed was collected in paper sacks and allowed to dry in screened wooden boxes to ensure adequate air circulation. Extremely small seed such as *Mimulus guttatus* was dried in cardboard boxes without screens. All seed was cleaned by hand by IAE employees using mesh screens. Cleaned seed currently resides in the IAE seed fridge and awaits BLM guidance for its future use. We recommend using the seed in three ways. First, BLM should consider starting a seed increase program for certain species to provide an adequate amount of genetically appropriate seed for restoration projects occurring at midelevations. Second, BLM could use the seed for nursery plug production to out-plant live material into restoration sites. Finally, BLM could use the seed to direct seed onto restoration sites. If seed is direct seeded, site preparation must occur first since seed that is seeded without adequate ground preparation is mostly wasted.

### **Collection Reports**

The 17 collection reports are appended to this document.

Table 2. List of seed collected and attributes.

Accession #	Species	Site	Elevation	Date	Distribution
OR090B - 01	Danthonia californica	Papenfus	1314	7/5/2010	2012 farm field increase
OR090B - 02	Festuca californica	Papenfus	1314	7/5/2010	2012 farm field increase
OR090B - 03	Danthonia californica	Dorena	757	7/16/2010	2012 farm field increase
OR090B - 04	Festuca californica	McGowan	1966	7/21/2010	2012 farm field increase
OR090B - 05	Balsamorhiza deltoidea	Mt Salem	2600	7/22/2010	IAE fridge
OR090B - 06	Bromus carinatus	Mt Salem	2600	7/22/2010	IAE fridge
OR090B - 07	Danthonia californica	Mt Salem	2600	7/22/2010	2012 farm field increase
OR090B - 08	Festuca californica	Mt Salem	2600	7/22/2010	2012 farm field increase
OR090B - 09	Mimulus guttatus	Mt Salem	2600	7/22/2010	IAE fridge
OR090B - 10	Danthonia californica	Camp Creek	990	7/29/2010	2012 farm field increase
OR090B - 11	Mimulus guttatus	Camp Creek	990	7/29/2010	IAE fridge
OR090B - 12	Danthonia californica	Twin Buttes	1767	8/11/2010	2012 farm field increase
OR090B - 13	Festuca californica	Twin Buttes	1767	8/11/2010	2012 farm field increase
OR090B - 14	Mimulus guttatus	Twin Buttes	1767	8/11/2010	IAE fridge
OR090B - 15	Deschampsia cespitosa	McGowan	1966	8/20/2010	IAE fridge
OR090B - 16	Wyethia angustifolia	McGowan	1966	8/20/2010	IAE fridge
OR090B - 17	Wyethia angustifolia	Eagle's Rest	944	8/23/2010	IAE fridge

### **Literature Cited**

All IAE reports can be downloaded from the IAE website <a href="http://appliedeco.org/reports">http://appliedeco.org/reports</a>

Bureau of Land Management. 2010. Technical protocol for the collection, study, and conservation of seeds from native plant species for Seeds of Success.

Date(s) Collector(s):		Comp Circle	05/07/1	elds. descriptions s	S Seed	External Collection Number:  NRCS PLANTS Code: DACA3  Cleaning Facility:  Ped Collection Ref. Number: ORO90B-01  ED ECOLOGY							
` ` L		1		3 Willor					T				
Country:	USA	]	on (T,O,B):	vaney	WE DI M	State:	OR	Count	y: Lane	e 			
<b>Location I</b>	<b>Jeta</b> ils:	PAPEN	FUS PRA	IRIE, EUGE	NE BLM								
Lat. (	dg/mir	1/sec) (ex: 4	0° 34' 19.5"	N): 43° 5	<b>54' 46.57"</b> N	GPS	Used?:	Yes	X I	f no, ple	ease see other side.		
Long. (dg	g/min/s	ec) (ex: 107°	36' 51.54"	W): 122° 5	5' 31.44" W	GPS	S Datum: WGS84						
Elevation	(feet):	1314		Lando	s (Permi	ssion?):	BLM (BE	HIND LO	OCKED	GATE)			
HABITAT DA	ΛTA												
Habitat, Asse Species & Eco Site Desc	logical	gical   FESTUCA CALIFORNICA UNDERSTORY. ANNUAL GRASSES DOMINATE PRAIRIE											
Modifying F	Factors:	NONE	NONE										
Land	l Form:	UPPER	SLOPES					Slope°:	30				
Lar	nd Use:	WILDL	IFE HAB	ITAT				Aspect:		SC	OUTH		
Ge	eology:	UNKN	OWN										
Soil T	exture:	Clay S	ilt Sand	Other:			Soi	il Color:					
COLLECTIO	N DAT	TA - If pla	nt has bee	n identified	by a special	list, plea	se see ot	her side.					
F	family:	POACE	EAE				No	o. of Plants	Sampled	l (min. 50	100		
•	Genus:	DANTI	HONIA				No	o. of Plants	Found (	approx	.): 250		
S	pecies:	CALIF	ORNICA					Area	Sample	d (acres	s): 1.0		
Subspecies/\	Variety:												
Seeds Collect	ted Fro	om: Plan	its X				•						
Plant Habit:			Gras	s/Grasslike				P	lant Heig	tht (feet)	): 1.5		
Native developmen this accessi	nt and			TILL BE USE TS ON EUG				ROWOUT	FOR FU	ΓURE R	RESTORATION		
Notes to assist of pressect flower color, of closely r	l speci odor,	men (e.g. presence											
Common Na	ime(s)	of Plants:	CALIFO	RNIA OATO	GRASS								
Photograph Ta	ıken:	Digital	35mm	Reference (PLANTS Code_Coll. Number_Pic. No.):		Where Image will be Filed:							

			BLOCK CAP				External Collection Number:  NRCS PLANTS Code: FECA							
_		-	olete all fields			1:			aning Fa		ECA			
Date(s) Colle	cted (DE		05/07/10	cripuons si			allectio	n Ref. Nun		ORO90B-	02			
ĺ	•			DICTION					ibei.	OKO70B	02			
Collector(s):	MAII	BLAKE	LEY-SMITH			PPLIED	ECOLO	GY						
Country:	USA		on (T,O,B):	3 - Willam Valley		State:	OR	Count	y: Lan	ie				
<b>Location I</b>	<b>Details:</b>	PAPEN	FUS PRAIR	IE, EUGEN	NE BLM									
Lat. (	(dg/min	/sec) (ex: 4	0° 34' 19.5" N):	43° 54	4' 46.57" N	N GPS	Used?:	Yes .	X	If no, pleas	se see other side.			
Long. (dg	/min/se	c) (ex: 107°	' 36' 51.54" W):	122° 55	' <b>31.44</b> " W	GPS GPS	Datum:	WGS84						
Elevation	(feet):	1314		Landov	wner Detail	ls (Permi	ssion?):	BLM (BE	HIND L	OCKED (	GATE)			
HABITAT DA	ΛTA													
Habitat, Asse Species & Eco Site Desc	logical	WOOD		DGE OF U	JPLAND P	RAIRIE.					ECURRENS A, SYNTHERIS			
Modifying I	Factors:	NONE	ONE											
Lanc	l Form:	UPPER	SLOPE				Slope°: 30							
Lai	nd Use:	WILDL	IFE HABITA	AT				Aspect:		2	S			
G	eology:	UNKN	OWN											
Soil T	exture:	Clay S	ilt Sand O	ther:			Soi	il Color:						
COLLECTIO	N DAT	A - If pla	nt has been i	dentified b	y a specia	list, plea	se see ot	her side.						
F	family:	POACE	EAE				No	o. of Plants	Sample	d (min. 50)	50			
(	Genus:	FESTU	CA				No	o. of Plants	Found	(approx.):	75			
S	pecies:	CALIF	ORNICA					Area	Sample	ed (acres):	0.3			
Subspecies/V	Variety:													
Seeds Collec	ted Fro	m: Plan	nts X											
Plant Habit:			Grass/G	rasslike				P	lant Heig	ght (feet):	4.0			
Native developmenthis access	nt and r		SEED WIL PROJECTS		-			ROWOUT I	FOR FU	TURE RE	STORATION			
Notes to assist of pressect flower color, of closely r	d specin odor, p	nen (e.g. oresence												
Common Na	ame(s) o	f Plants:	CALIFORN	IIA FESCU	JE									
Photograph Ta	iken:		35mm (PL	Reference ANTS Code_Coll. Number_Pic. No.): ITALS				e Image will						

		•	ete all fiel			LANTS C		ACA3					
		Circle 1	relevant d	escriptions s	hown in	italic	s.		Cle	aning Faci	lity:		
Date(s) Colle	cted (DI	D/MM/YY):	16/7/10			SOS	Seed (	Collectio	n Ref. Nun	nber: O	RO90B-0	3	
Collector(s):	MATT	BLAKELI	EY-SMIT	H, INSTITU		R APF	LIED	ECOLO(	GY				
Country:	USA	Ecoregion	(T,O,B):	3 - Willan Valley	nette	s	tate:	OR	Count	y: Lane			
Location 1	Details:	DORENA	A PRAIRI	E, Eugene B	BLM								
Lat. (	(dg/min	/sec) (ex: 40°	34' 19.5" N	D: 43° 4	7' 10.75	5" N	GPS	Used?:	Yes	X If	no. please	e see other side.	
	. 0	ec) (ex: 107° 3			7' 57.53'	" W	GPS	Datum:	WGS84		· 1		
Elevation	(feet):	757		Lando	Permi	nission?): BLM							
HABITAT DA	ATA												
Habitat, Ass Species & Eco Site Desc	ological	PASTUR	E GRASS	ET AND UP SES. ANTHO CA RUBRA	OXANT							DUCED ARE, DAUCUS	
Modifying l	Factors:	VERY LIC	GHT REC										
Land	d Form:	BOTTON	I LAND						Slope°:	0			
La	nd Use:		AL AREA CNIC ARI	SURROUN EA	IDING (	CAMI	P	Aspect: FLAT					
G	eology:	UNKNO	WN										
Soil T	Texture:	Clay Sil	t Sand	Other:				Soil Color:					
COLLECTIO	N DAT	A - If plant	has beer	identified	by a spe	cialis	t, plea	se see ot	her side.				
I	Family:	POACEA	Æ					No	of Plants	Sampled	(min. 50 ):	200	
	Genus:	DANTHO	ONIA					No	o. of Plants	Found (a	pprox.):	700	
S	pecies:	CALIFO	RNICA						Area	Sampled	(acres):	5	
Subspecies/	Variety:												
Seeds Collec	ted Fro	m: Plants	X										
Plant Habit:			Grass/	Grasslike					P	lant Heigh	t (feet):	1.5	
Native developme this access	nt and 1	research		LL BE USE S ON EUG					ROWOUT	FOR FUT	URE RES	STORATION	
Notes to assist identification of pressed specimen (e.g. flower color, odor, presence of closely related species):													
Common Na	ame(s) o	of Plants:	CALIFOR	RNIA OATG									
Photograph Ta	aken:	Digital 3.	5mm (	Reference PLANTS Code_Coll. Number Pic. No.):	_	_		Where Image will be Filed:					

		BLOCK CAP				External Collection Number:  NRCS PLANTS Code: FECA					
		e relevant des		hown in <i>ita</i>	lics				Facility:	ECIT	
Date(s) Collected (I			seriptions si			Collectio	n Ref. Nun	_	ORO90B-	04	
		LEY-SMITH	INSTITU	TE FOR A	PPLIED	FCOLO	GY				
Country: USA		on (T,O,B):	3 - Willam Valley		State:	OR	Count	y: L	ANE		
Location Details	: MCGO	WAN MEAL		ENE BLM	[						
Lat. (dg/mi	n/sec) (ex:	40° 34' 19.5" N):	44°10	0° 35.46" N	N GPS	Used?:	Yes	X	If no, plea	se see other side.	
Long. (dg/min/	sec) (ex: 107	° 36' 51.54" W):	122° 59	)' 46.64'' V	V GPS	PS Datum: WGS84					
Elevation (feet)	1,966		Landov	wner Detai	ls (Permi	ssion?):	BLM				
HABITAT DATA			<u> </u>								
Habitat, Associate Species & Ecologica Site Descriptor	ıl WYET	PRAIRIE SUR PHIA ANGUS CEA MALV	TIFOLIA,	GERANIU						ALIFORNICA, GARE,	
Modifying Factors	s: VERY	LIGHT TRA	MPLING F								
Land Forn	n: MID S	LOPE, WET	PRAIRIE			Slope°: 10					
Land Use	e: WILDI	LIFE HABITA	AT, RECRI	EATION			Aspect:		S	W	
Geology	: UNKN	OWN									
Soil Texture	e: Clay S	Silt Sand O	ther:			Soil Color:					
COLLECTION DA	TA - If pla	nt has been i	identified k	oy a specia	list, plea	se see ot	her side.				
Family	POACI	EAE				No	o. of Plants	Sampl	ed (min. 50)	: 101	
Genus	: FESTU	JCA				No	o. of Plants	Found	d (approx.)	: 250	
Species	: CALIF	ORNICA					Area	Samp	oled (acres)	: 0.3	
Subspecies/Variety	<b>/</b> :										
Seeds Collected Fi	om: Plan	nts X									
Plant Habit:		Grass/G	rasslike				P	lant He	eight (feet):	4.0	
Native plant development and this accession wi	l research	SEED WIL PROJECTS					ROWOUT	FOR F	UTURE RE	ESTORATION	
Notes to assist ider of pressed spec flower color, odor of closely related	imen (e.g. presence										
Common Name(s)	of Plants:	CALIFORN	NIA FESCU	JE							
Photograph Taken:	Digital Use 3	35mm (PL)	Reference ANTS Code_Coll. Number_Pic. No.): ITALS				e Image will				

		Comp	lete all fiel	ds.			NRCS P	IANTS	ode: B	ADE2		
		•		escriptions s	hown in	italic	·s.			aning Fac		ADL2
Date(s) Colle	cted (DI	D/MM/YY):	22/07/10	-		sos	Seed	Collectio	n Ref. Nun		RO90B-0	5
Collector(s):	MATT	Γ BLAKEL	EY-SMIT	H, INSTITU	TE FOR	R APF	LIED	ECOLO	GY			
Country:	USA	Ecoregio	n (T,O,B):	3 - Willan Valley	nette	s	State:	OR	Count	y: Lane	:	
<b>Location I</b>	Details:	MOUNT	Γ SALEM,	EUGENE E	BLM							
Lat. (	(dø/min	/sec) (ex: 40	)° 34' 19.5" N	n: 43° 5	5' 47.27	", N	GPS	Used?:	Yes	X If	no. please	e see other side.
		ec) (ex: 107°			8' 47.82'			Datum:	WGS84		, F	
Elevation	ı (feet):	2,600		Lando	wner De	etails (	(Permi	ssion?):	BLM			
HABITAT DA	ATA											
Habitat, Ass Species & Eco Site Desc	ological	BROMU	JS CARAN	PS AND UI NATUS, DA LUS GUTT	NTHON						,	
Modifying I	Factors:	NONE										
Land	d Form:	UPPER	SLOPE, R	OCKY OUT	CROPS	5			Slope°:	60		
La	nd Use:	WILDL	IFE HABI	ГАТ					Aspect:		SW	7
G	eology:	UNKNO	OWN									
Soil T	Texture:	Clay Si	ilt Sand (	Other:				Soi	l Color:			
COLLECTIO	N DAT	A - If plan	nt has been	identified	by a spe	cialis	t, plea	se see ot	her side.			
I	Family:	ASTERA	ACEAE					No	. of Plants	Sampled	(min. 50 ):	322
	Genus:	BALSA	MORHIZA	1				No	o. of Plants	Found (a	approx.):	5,000
S	pecies:	DELTO	IDEA						Area	Sample	l (acres):	1.5
Subspecies/	Variety:											
Seeds Collec	ted Fro	om: Plana	ts X									
Plant Habit:			F	Forb					P	lant Heigl	nt (feet):	1.5
Native developmenthis access	nt and			LL BE USE					ROWOUT	FOR FUT	URE RES	STORATION
Notes to assi- of pressec flower color, of closely i	d specir , odor, <sub>j</sub>	nen (e.g. presence										
Common Na	ame(s) o	of Plants:	DELTOID	BALSALN	//ROOT							
Photograph Ta	aken:	Digital 3	35mm (	Reference PLANTS Code_Coll. Number_Pic. No.):				Where Image will be Filed:				

			BLOCK CAP				External Collection Number:  NRCS PLANTS Code: BRCA5					
_		•	olete all field			1.			LAN IS aning F	<u> </u>	3RCA5	
Date(s) Colle	ctad (DE		22/07/10	scriptions si			Callectio	n Ref. Nun	Ī	ORO90B-	06	
1									ibei.	ORO30B-	00	
Collector(s):	MATT	BLAKEI	LEY-SMITH	•		PPLIED	ECOLO(	GY				
Country:	USA		on (T,O,B):	3 - Willam Valley		State:	OR	Count	y: La	ne		
<b>Location I</b>	Details:	MOUN	T SALEM, E	UGENE B	LM							
Lat. (	(dg/min	/sec) (ex: 4	0° 34' 19.5" N):	43° 55	5' <b>47.27</b> " N	N GPS	Used?:	Yes	X	If no, plea	se see other side.	
Long. (dg	g/min/se	c) (ex: 107°	36' 51.54" W)	122° 38	8' <b>47.82</b> " W	<b>7.82"</b> W GPS Datum: <i>WGS84</i>						
Elevation	(feet):	2,600		Landov	wner Detail	ls (Permi	ssion?):	BLM				
HABITAT DA	ATA											
Habitat, Asse Species & Eco Site Desc	ological	BROM	Y OUTCROF US CARANA NA, MIMUL	ATUS, DAI	NTHONIA						MERI, I, CLARKIA	
Modifying I	Factors:	NONE										
Land	d Form:	UPPER	SLOPE, RO	CKY OUT	CROPS		Slope°: 60					
La	nd Use:	WILDL	IFE HABIT	<b>A</b> Τ				Aspect:		S	W	
G	eology:	UNKNO	OWN									
Soil T	Cexture:	Clay S	ilt Sand O	ther:			Soil Color:					
COLLECTIO	N DAT	A - If pla	nt has been i	dentified b	oy a specia	list, plea	se see ot	her side.				
I	Family:	POACE	EAE				No	. of Plants	Sample	ed (min. 50)	: 282	
	Genus:	BROM	US				No	o. of Plants	Found	(approx.)	: 2,000	
S	pecies:	CARIN	ATUS					Area	Sampl	ed (acres)	: 2.0	
Subspecies/V	Variety:											
Seeds Collec	ted Fro	m: Plan	ets X									
Plant Habit:			Grass/G	rasslike				P	lant Hei	ght (feet):	3.0	
Native developmenthis access	nt and r		SEED WIL PROJECTS					ROWOUT	FOR FU	JTURE RE	ESTORATION	
Notes to assi- of pressec flower color, of closely i	d specin , odor, p	nen (e.g. oresence										
Common Na	ame(s) o	f Plants:	CALIFORN	NIA BROM	IE							
Photograph Ta	aken:		35mm (PL	Reference ANTS Code_Coll. Number_Pic. No.): ITALS				e Image will ternal Collec				

		Compl	lete all fiel	ds.			NRCS P	IANTSC	ode: D	ACA3			
		•		escriptions s	hown in	italic	s.	Cleaning Facility:					
Date(s) Colle	cted (DI		22/07/10	-				Collectio	n Ref. Nun		RO90B-0	7	
Collector(s):	MATT	BLAKEL	EY-SMIT	H, INSTITU	TE FOR	APP	LIED	ECOLO	GY				
Country:	USA	Ecoregion	n (T,O,B):	3 - Willan Valley	nette	s	tate:	OR	Count	y: Lane			
<b>Location 1</b>	Details:	MOUNT	SALEM,	EUGENE B	BLM								
Lat.	(dg/min	/sec) (ex: 40	° 34' 19.5" N	i): 43° 5	5' 47.27	" N	GPS	Used?:	Yes	X If	no, please	e see other side.	
Long. (dg	g/min/se	ec) (ex: 107°	36' 51.54" W	/): 122° 38	8' 47.82'	' W	GPS	Datum:	WGS84				
Elevation	(feet):	2,600		Lando	wner De	tails (	Permi	ermission?): BLM					
HABITAT DA	ATA												
Habitat, Ass Species & Eco Site Desc	ological	BROMU	IS CARAN	PS AND UI VATUS, DA LUS GUTT									
Modifying l	Factors:	NONE											
Land	d Form:	UPPER	SLOPE, R	OCKY OUT	CROPS				Slope°:	60			
La	nd Use:	WILDLI	FE HABI	ГАТ					Aspect:		SW	7	
G	eology:	UNKNO	WN										
Soil T	Γexture:	Clay Si	lt Sand (	Other:				Soil Color:					
COLLECTIO	N DAT	A - If plan	t has been	identified	by a spec	cialis	t, plea	se see ot	her side.				
I	Family:	POACE	AE					No	of Plants	Sampled	(min. 50 ):	130	
	Genus:	DANTH	ONIA					No	o. of Plants	Found (a	pprox.):	500	
S	species:	CALIFO	RNICA						Area	Sample	l (acres):	2.0	
Subspecies/	Variety:												
Seeds Collec	ted Fro	m: Plant	s X										
Plant Habit:			Grass/	Grasslike					P	lant Heigl	nt (feet):	2.0	
Native developme this access	nt and	research		LL BE USE 'S ON EUG					ROWOUT	FOR FUT	URE RES	TORATION	
Notes to assi of pressec flower color of closely i	d specir , odor, j	nen (e.g. presence											
Common Na	ame(s) c	of Plants:	CALIFOR	RNIA OATG	RASS								
Photograph Ta	aken:		35mm (	Reference PLANTS Code_Coll. Number_Pic. No.):				Where Image will be Filed:					

			SLOCK CAP				External Collection Number:  NRCS PLANTS Code: FECA					
_		•	olete all fields			<b>1</b> ·			LAN I S aning Fa		ECA	
Date(s) Colle	otod (DE		22/07/10	scriptions sn			Callactio	n Ref. Nun	Ī	ORO90B-	ng	
1									ibei.	OKO90B-	00	
Collector(s):	MATT	BLAKEI	LEY-SMITH	•		PPLIED	ECOLO(	GY				
Country:	USA		on (T,O,B):	3 - Willam Valley		State:	OR	Count	y: Laı	ne		
<b>Location I</b>	Details:	MOUN	Γ SALEM, E	UGENE BI	LM							
Lat. (	(dg/min	/sec) (ex: 4	0° 34' 19.5" N):	43° 55	5' <b>47.27</b> " N	GPS	Used?:	Yes	X	If no, plea	se see other side.	
Long. (dg	g/min/se	c) (ex: 107°	36' 51.54" W):	122° 38	' <b>47.82</b> " W	GPS	Datum:	WGS84				
Elevation	(feet):	2,600		Landow	vner Detail	s (Permi	Permission?): BLM					
HABITAT DA	ATA											
Habitat, Asse Species & Eco Site Desc	ological	CARAN		NTHONIA							I, BROMUS A AMOENA,	
Modifying I	Factors:	NONE										
Land	d Form:	UPPER	SLOPE, RO	CKY OUT	CROPS		Slope°: 30					
La	nd Use:	WILDL	IFE HABITA	AΤ				Aspect:		S	W	
G	eology:	UNKNO	OWN									
Soil T	Cexture:	Clay S	ilt Sand O	ther:			Soi	l Color:				
COLLECTIO	N DAT	A - If pla	nt has been i	dentified b	y a specia	list, plea	se see ot	her side.				
I	Family:	POACE	AE				No	of Plants	Sample	d (min. 50 )	223	
	Genus:	FESTU	CA				No	o. of Plants	Found	(approx.)	800	
S	pecies:	CALIFO	ORNICA					Area	Sampl	ed (acres):	1.0	
Subspecies/V	Variety:											
Seeds Collec	ted Fro	m: Plan	ts X									
Plant Habit:			Grass/G	rasslike				P	lant Hei	ght (feet):	4.0	
Native developmenthis access	nt and r		SEED WIL PROJECTS		-			ROWOUT	FOR FU	TURE RE	STORATION	
Notes to assi- of pressec flower color, of closely r	d specin , odor, p	nen (e.g. oresence										
Common Na	ame(s) o	f Plants:	CALIFORN	NIA FESCU	Е							
Photograph Ta	aken:		35mm (PL)	Reference ANTS Code_Coll. Number_Pic. No.):				e Image will ternal Collec				

		Compl	lete all fiel	ds.			NRCS P	IANTS	ode: M	GU				
		•		escriptions s	hown in	italic	s.			aning Fac				
Date(s) Colle	cted (DI	D/MM/YY):	22/07/10	-		sos	Seed (	Collectio	n Ref. Nun		RO90B-0	9		
Collector(s):	MATT	BLAKEL	EY-SMIT	H, INSTITU	TE FOR	APP	LIED	ECOLO	GY					
Country:	USA	Ecoregion	n (T,O,B):	3 - Willan Valley	nette	s	tate:	OR	Count	y: Lane	:			
Location 1	Details:	MOUNT	SALEM,	EUGENE E	BLM									
Lat. (	(dg/min	/sec) (ex: 40	° 34' 19.5" N	n: 43° 5	5' 47.27	" N	GPS	Used?:	Yes	X In	no please	e see other side.		
	. 0	ec) (ex: 107°.			8' 47.82'			Datum:	WGS84		no, preuse	see office state.		
Elevation	ı (feet):	2,600		Lando	andowner Details (Permission?): BLM									
HABITAT DA	HABITAT DATA													
Habitat, Ass Species & Eco Site Desc	ological	CARAN								BROMUS AMOENA,				
Modifying l	Factors:	NONE												
Land	d Form:	ROCKY	OUTCRO	PS, WET S	EEPS				Slope°:	60				
La	nd Use:	WILDLI	FE HABI	ГАТ					Aspect:		SW	7		
G	eology:	UNKNO	WN											
Soil T	Γexture:	Clay Si	lt Sand	Other:				Soi	l Color:					
COLLECTIO	N DAT	'A - If plan	t has been	identified	by a spe	cialis	t, plea	se see otl	her side.					
I	Family:	SCROPI	HULARIA	CEAE				No	. of Plants	Sampled	(min. 50):	301		
	Genus:	MIMUL	US					No	o. of Plants	Found (a	approx.):	100,000		
S	species:	GUTTA	TUS						Area	Sample	l (acres):	0.25		
Subspecies/	Variety:													
Seeds Collec	ted Fro	m: Plant	s X											
Plant Habit:		·	F	Forb					P	lant Heigl	nt (feet):	0.4		
Native developme this access	nt and	research		LL BE USE 'S ON EUG					ROWOUT	FOR FUT	URE RES	TORATION		
Notes to assi of pressec flower color of closely i	d specir , odor, j	nen (e.g. presence												
Common Na	ame(s) o	of Plants:	SEEP MC	NKEYFLO	WER									
Photograph Ta	aken:		35mm (	Reference PLANTS Code_Coll. Number_Pic. No.):			<del></del>	Where Image will be Filed:						

Date(s) Colle	cted (D	Comp Circle	BLOCK CA plete all fiel e relevant d 29/07/20	lds. lescriptions s		External Collection Number:  NRCS PLANTS Code:  Cleaning Facility:  d Collection Ref. Number:  OR090B-10					
Collector(s):	MAT	Γ BLAKE	LEY-SMIT	H, INSTITU	TE FOR AP	PLIED	ECOLO	GY			
Country:	USA	Ecoregio	on (T,O,B):	3 - Willar Valley	nette	State:	OR	Count	y: Lane	;	
Location 1	Details:	CAMP	CREEK RI	DGE, Eugei	ne BLM						
Lat.	(dg/mir	<b>1/sec</b> ) (ex: 4	0° 34' 19.5" I	19.5" N): 44° 05' 06.84" N GPS				Yes	If	f no, ple	ease see other side.
Long. (dg	g/min/s	ec) (ex: 107	' 36' 51.54" V	V): 122° 5	3' 19.18" W	GPS	Datum:	WGS84			
Elevation	(feet):	990		Lando	wner Details	(Permi	ssion?):	BLM			
HABITAT DA											
Habitat, Ass Species & Eco Site Desc	ological	CALIF	ORNICA, I							, DANTHONIA CUS PUSILLUS	
Modifying l	Factors:	NONE									
Land	d Form:	MID-S	LOPE, UPI	AND PRAI	RIE			Slope°:	10		
La	nd Use:	WILDI	IFE HABI	TAT, OPEN	SPACE			Aspect:		SC	DUTH
G	eology:	UNKN	OWN				-	•			
Soil 7	Texture:	Clay S	ilt Sand	Other:			Soi	il Color:			
COLLECTIO	N DAT	TA - If pla	nt has been	n identified	by a speciali	st, plea	se see of	her side.			
1	Family:	POACE	EAE				No. of Plants Sampled (min. 50 ): 154				
	Genus:	DANTI	HONIA				No. of Plants Found (approx.): 500				
S	pecies:	CALIF	ORNICA				Area Sampled (acres): 1.5				
Subspecies/	Variety:										
Seeds Collec	ted Fro	m: Plan	ts X				1				
Plant Habit:			Grass	/Grasslike	ı			P	lant Heigl	ht (feet)	): 1.5
Native developme this access	nt and				D FOR INCI ENE BLM P			ROWOUT	FOR FUT	URE R	RESTORATION
Notes to assi of pressec flower color of closely i	d speci , odor,	men (e.g. presence									
Common Na	ame(s)	of Plants:	CALIFO	RNIA OATO	GRASS						
Photograph Ta	aken:	Digital	35mm	Reference (PLANTS Code_Coll. Number_Pic. No.):			Where Image will be Filed:				

		BLOCK CAP				External Collection Number:  NRCS PLANTS Code: MIGU					
		-	criptions shown	n in <i>ital</i>	lics				acility:	iide -	
Date(s) Collected (D						Collectio	n Ref. Nun	Ťг	ORO90B-	11	
			, INSTITUTE F	OR AI	PPLIED	FCOLO	GY	L			
Country: USA	1	on (T,O,B):	3 - Willamette Valley		State:	OR	Count	y: La	ne		
Location Details	: CAMP	CREEK PRA	IRIE, EUGENI	E BLM	I			<u> </u>			
Lat. (dg/mi	n/sec) (ex:	40° 34' 19.5" N):	"N): 44° 05' 06.84"		GPS	Used?:	Yes X		If no, plea	se see other side.	
Long. (dg/min/s	ec) (ex: 107	° 36' 51.54" W):	122° 53' 19.	.18" W	GPS	Datum:	WGS84				
Elevation (feet)	: 990		Landowner	Detail	s (Permi	ssion?):	BLM				
HABITAT DATA			<u>-</u>								
Habitat, Associated Species & Ecologica Site Descriptor	I CALIF	ORNICA, EL	ON SOUTH FA YMUS GLAUC A OREGANA.								
Modifying Factors	: NONE										
Land Form	: MID-S	LOPE, UPLA	ND PRAIRIE				Slope°:	10			
Land Use	: WILDI	LIFE HABITA	AT, OPEN SPA	CE			Aspect:		SOU	JTH	
Geology	: UNKN	OWN									
Soil Texture	: Clay S	Silt Sand Ot	her:			Soi	l Color:				
COLLECTION DA	ΓA - If pla	nt has been i	dentified by a s	special	list, plea	se see ot	her side.				
Family	: SCROI	PHULARIAC	EAE			No. of Plants Sampled (min. 50): 270					
Genus	: MIMU	LUS				No	o. of Plants	Found	(approx.)	100,000	
Species	: GUTTA	ATUS				Area Sampled (acres): 0.5					
Subspecies/Variety	:										
Seeds Collected Fr	om: Plan	nts									
Plant Habit:	_	Fo	rb				P	lant He	ight (feet):	0.4	
Native plant development and this accession wi	research		L BE USED FO ON EUGENE				ROWOUT	FOR FU	JTURE RE	STORATION	
Notes to assist iden of pressed speci flower color, odor, of closely related	men (e.g. presence										
Common Name(s)	of Plants:	seep monke	yflower								
Photograph Taken:	Digital Use 1	33mm (PLA	Reference ANTS Code_Coll. fumber_Pic. No.):				e Image will				

		Comp	lete all fie	elds					NDCC D	LANTS (	Sodar D	ACA3		
		•		descriptions s	hown in	italic	2.5			aning Fac		RO90B-12		
Date(s) Colle	cted (DI		11/08/1	-				Collectio	n Ref. Nun		inty. OI	(O) (D 12		
Collector(s):	1				TE EOE			ECOLOGY						
Conector(s):	IVIATI	DLAKEL	E 1 - 51VII	3 - Willar		AFF	LIED	, LCOLOGI						
Country:	USA	Ecoregio	n (T,O,B):	Valley	nette	S	state:	OR	Count	y: Lane				
Location I	Details:	TWIN B	BUTTES 1	PRAIRIE, EU	GENE I	BLM								
Lat.	(dg/min	/sec) (ex: 40	° 34' 19.5"	N): 43° 4	1' 29.75	" N	GPS	Used?:	Yes	X If	no, please	e see other side.		
Long. (dg	W): 123° 0	2' 11.96'	" W	GPS	Datum:	WGS84								
Elevation	(feet):	1767		Lando	wner De	etails (	(Permi	ssion?):	BLM					
HABITAT DA	ATA			<u></u>										
Habitat, Asse Species & Eco Site Desc	ological	ACHNA		RIE ON THIN M LEMMON						*				
Modifying I	Factors:	NONE												
Land	d Form:	: UPPER SLOPE							Slope°: 40					
La	nd Use:	WILDL	IFE HAB	ITAT				Aspect:		SW	7			
G	eology:	Rock Ou	ıtcrop – V	Witzel Comple										
Soil T	Texture:	Clay Si	ilt Sand	Other:				Soi	l Color:					
COLLECTIO	N DAT	A - If plan	nt has bee	en identified	by a spe	cialis	t, plea	se see ot	her side.					
I	Family:	POACE.	AE					No. of Plants Sampled (min. 50): 400						
	Genus:	DANTH	IONIA					No	10,000					
S	species:	CALIFO	ORNICA					Area Sampled (acres): 0.8						
Subspecies/	Variety:													
Seeds Collec	ted Fro	m: Plan	ts X											
Plant Habit:			Gras	s/Grasslike					P	lant Heigl	nt (feet):	1.5		
Native developmenthis access	nt and			/ILL BE USE CTS ON EUG					ROWOUT	FOR FUT	URE RES	STORATION		
Notes to assist identification of pressed specimen (e.g. flower color, odor, presence of closely related species):														
Common Na	ame(s) o	of Plants:	CALIFO	RNIA OATO	GRASS									
Photograph Ta	aken:	Digital 3	35mm	Reference (PLANTS Code_Coll. Number_Pic. No.):				Where Image will be Filed:						

	Use E	BLOCK CAI	PITALS	External Collection Number:									
	•	olete all field			NRCS PLANTS Code: FECA  italics. Cleaning Facility:								
		e relevant de	scriptions s			~		_					
Date(s) Collected (							n Ref. Num	ber: Ol	R090B-13	3			
Collector(s): MA	TT BLAKEI	LEY-SMITH	·		PPLIED	ECOLO	GY						
Country: USA	J	on (T,O,B):	3 - Willar Valley		State:	OR	County	County: Lane					
<b>Location Detail</b>	s: TWIN I	BUTTES PR	AIRIE, EU	IGENE BLI	M								
Lat. (dg/m	nin/sec) (ex: 4	0° 34' 19.5" N	): 43° 4	1' 29.75" N	N GPS	Used?:	Yes 2	X If	If no, please see other side.				
Long. (dg/min/	/sec) (ex: 107°	36' 51.54" W	): 123° 02	<b>2' 11.96''</b> W	GPS	Datum:	WGS84						
Elevation (feet	t): 1767		Lando	wner Detail	ls (Permi	ssion?):	BLM						
HABITAT DATA													
Habitat, Associate Species & Ecologic Site Descripto	al ARBUT	ΓUS MENZI						MENZIESII, IUM					
Modifying Factor	rs: NONE	NONE											
Land Form	n: UPPER	SLOPE					Slope°:	20					
Land Us	e: WILDL	IFE HABIT	AT				Aspect:		SW	7			
Geolog	y: UNKNO	OWN											
Soil Textur	re: Clay S	ilt Sand C	Other:			Soi	l Color:						
COLLECTION DA	ATA - If pla	nt has been	identified	by a specia	list, plea	se see ot	her side.						
Famil	y: POACE	EAE				No. of Plants Sampled (min. 50 ): 253							
Genu	s: FESTU	CA				No. of Plants Found (approx.): 1500							
Specie	es: CALIFO	ORNICA				Area Sampled (acres): 2							
Subspecies/Variet	y:												
Seeds Collected F	rom: Plan	nts X											
Plant Habit:		Grass/0	Grasslike				Pl	ant Heigh	t (feet):	4.0			
Native plant development and this accession w	d research			D FOR INC ENE BLM			ROWOUT I	FOR FUT	URE RES	TORATION			
Notes to assist ide of pressed spec flower color, odor of closely relate	cimen (e.g.												
Common Name(s)	) of Plants:	CALIFOR	NIA FESC	UE									
Photograph Taken:	Digital	25 100 100	Reference LANTS Code_Coll. Number_Pic. No.):			Where	e Image will	be Filed:					

		Comp	BLOCK CAP				External Collection Number:  NRCS PLANTS Code: MIGU  Cleaning Facility:					
Date(s) Colle	cted (DE		e relevant des	criptions sho			Collectio	n Ref. Num		4		
Collector(s):	`		LEY-SMITH	INSTITUT								
Country:	USA		on (T,O,B):	3 - Willamer Valley		State:	OR	County	: Lane			
<b>Location I</b>	Details:	TWIN	BUTTES PRA	AIRIE, EUG	ENE BL	Л						
T a4	(d.~/i	(200)	0° 241 10 59 N	42° 41,	20.75% N	CDC	11 10-	V V	Z If no mloos			
		, .	0° 34′ 19.5″ N):			_	Used?:	Yes X WGS84	II no, pieas	e see other side.		
			' 36' 51.54" W):				Datum:					
Elevation	` ′	1767		Landowi	ner Detail	s (Permi	ssion ? ):	BLM				
HABITAT DA Habitat, Ass Species & Eco Site Desc	ociated ological		Y OUTCROP HONIA CAL				,	HNATHERUM L S.	EMMONII,			
Modifying I	Factors:	Mowed	Burned	Grazed Fl	looded	Seeded	Trampled Other:					
Land	d Form:	UPPER	SLOPE, RO	CKY OUTC	CROPS			Slope°:	30			
La	nd Use:	WILDI	IFE HABITA	ΛT				Aspect:	SV	V		
G	eology:	UNKN	OWN									
Soil T	exture:	Clay S	ilt Sand O	her:			Soi	l Color:				
COLLECTIO	N DAT	A - If pla	nt has been i	dentified by	a special	list, plea	se see ot	her side.				
I	Family:	SCROP	HULARIAC	EAE			No. of Plants Sampled (min. 50 ): 700					
	Genus:	MIMU	LUS				No	o. of Plants	Found (approx.):	100,000		
S	pecies:	GUTTA	ATUS				Area Sampled (acres): 0.3					
Subspecies/V	Variety:											
Seeds Collec	ted Fro	m: Plan	nts X									
Plant Habit:			Fo	rb				Pla	ant Height (feet):	0.4		
Native developmenthis access	nt and r			L BE USED ON EUGEN				ROWOUT F	OR FUTURE RE	STORATION		
Notes to assi- of pressec flower color, of closely i	d specin , odor, p	nen (e.g. presence										
Common Na	ame(s) o	f Plants:	SEEP MON	KEYFLOW	ER							
Photograph Ta	aken:	Digital Use I	35mm (PL.	Reference ANTS Code_Coll. Jumber_Pic. No.):  ITALS			Where Image will be Filed:  External Collection Number:					

		Compl	lete all fie	lds.					NRCS P	LANTS C	ode: DI	ECE	
		•		lescriptions s	hown in	italic	s.			aning Faci		LCL	
Date(s) Colle	cted (DI		20/08/10	-				Collectio	n Ref. Nun		RO90B-1	5	
Collector(s):	MATT	BLAKEL	EY-SMIT	TH, INSTITU	TE FOR	APF	LIED	ECOLO	GY				
Country:	USA	Ecoregion	n (T,O,B):	3 - Willar Valley	nette	s	state:	OR	Count	y: LAN	Е		
<b>Location I</b>	Details:	MCGOV	VAN ME	ADOW, EUC	GENE BL	LM							
Lat. (	(dg/min	/sec) (ex: 40	° 34' 19.5"	N): 44°1	0' 35.46'	" N	GPS	Used?:	d?: Yes X If no, please see			e see other side.	
Long. (dg	W): 122° 59	9' 46.64''	, W	GPS	Datum:	WGS84							
Elevation	(feet):	1,966		Lando	wner Det	tails (	(Permi	ssion?):	BLM				
HABITAT DA	ATA												
Habitat, Associated Species & Ecological Site Descriptor:  WET PRAIRIE SURROUNDED BY MATURE CONIFER FOREST. DA WYETHIA ANGUSTIFOLIA, GERANIUM OREGANUM, LEUCANTH SIDALCEA MALVAEFLORA.												,	
Modifying I	Factors:	VERY L	IGHT TR	AMPLING	EATIO	ON USE							
Land	d Form:	MID SL	OPE, WE	T PRAIRIE				Slope°:					
La	nd Use:	WILDLIFE HABITAT, RECREATION							Aspect:		SW	7	
G	eology:	UNKNO	WN										
Soil T	Texture:	Clay Si	lt Sand	Other:				Soi	l Color:				
COLLECTIO	N DAT	A - If plan	t has bee	n identified	by a spec	cialis	t, plea	se see ot	her side.				
I	Family:	POACE	AE					No. of Plants Sampled (min. 50): 300					
	Genus:	DESCH	AMPSIA					No	o. of Plants	5,000			
S	pecies:	CESPIT	OSA					Area Sampled (acres): 3					
Subspecies/	Variety:												
Seeds Collec	ted Fro	m: Plant	s X										
Plant Habit:			Grass	/Grasslike					P	lant Heigh	it (feet):	3.0	
Native developmenthis access	nt and i	research		ILL BE USE TS ON EUG					ROWOUT	FOR FUT	URE RES	STORATION	
Notes to assist identification of pressed specimen (e.g. flower color, odor, presence of closely related species):													
Common Na	ame(s) c	of Plants:	TUFTED	HAIRGRAS	SS								
Photograph Ta	aken:		35mm	Reference (PLANTS Code_Coll. Number_Pic. No.):				Where	e Image will	be Filed:			

		Comp	BLOCK CAP plete all fields relevant des		n <i>itali</i>	cs.	External Collection Number:  NRCS PLANTS Code: WYAN  Cleaning Facility:					
Date(s) Colle	cted (DD	/MM/YY):	20/08/10		SOS	S Seed (	Collectio	n Ref. Nu	mber	: ORO90B-1	6	
Collector(s):	MATT	BLAKE	LEY-SMITH,	INSTITUTE FO	R AP	PLIED	ECOLO	GY				
Country:	USA	Ecoregio	on (T,O,B):	3 - Willamette Valley		State:	OR	Cour	ity:	LANE		
<b>Location 1</b>	Details:	MCGO	WAN MEAD	OOW, EUGENE F	BLM							
Lat.	(dg/min/	/sec) (ex: 4	0° 34' 19.5" N):	44°10′ 35.4	<b>6"</b> N	GPS	Used?:	e see other side.				
Long. (dg	g/min/se	c) (ex: 107°	' 36' 51.54" W):	122° 59' 46.64	4" W	GPS	Datum:	WGS84				
Elevation	(feet):	1,966		Landowner D	etails	(Permis	ssion?):	BLM				
HABITAT DA	ATA			_			<u>'</u>					
Habitat, Ass Species & Eco Site Desc	ological	ociated WET PRAIRIE SURROUNDED BY MATURE CONIFER FOREST. DANTHONIA CAL logical WYETHIA ANGUSTIFOLIA, GERANIUM OREGANUM, LEUCANTHEMUM VULGA										
Modifying l	Factors:	VERY	LIGHT TRAI	MPLING FROM								
Land	d Form:	MID SI	LOPE, WET I	PRAIRIE				Slope°:	10			
La	nd Use:	WILDL	IFE HABITA	AT, RECREATIO	N			Aspect:		SW	7	
G	eology:	UNKN	OWN									
Soil T	Texture:	Clay S	ilt Sand Ot	her:			Soi	l Color:				
COLLECTIO	N DAT	A - If pla	nt has been i	dentified by a sp	eciali	st, plea	se see otl	her side.				
I	Family:	ASTER	ACEAE				No. of Plants Sampled (min. 50): 60					
	Genus:	WYET	HIA				No	o. of Plant	s Fou	and (approx.):	10,000	
S	pecies:	ANGU	STIFOLIA				Area Sampled (acres): 1.5					
Subspecies/	Variety:											
Seeds Collec	ted Fro	m: Plan	nts X									
Plant Habit:			Fo	rb				]	Plant 1	Height (feet):	1.8	
Native developme this access		esearch		L BE USED FOR ON EUGENE B				ROWOUT	FOR	FUTURE RES	TORATION	
Notes to assi of pressec flower color of closely i	d specin , odor, p	nen (e.g. resence		-								
Common Na	ame(s) o	f Plants:	CALIFORN	IIA COMPASSPI	LANT							
Photograph Ta	aken:		35mm (PL)	Reference NATS Code_Coll. Jumber_Pic. No.): ITALS			Where Image will be Filed:  External Collection Number:					

		Comp	lete all field	ds.					NRCS P	LANTS	ode: W	YAN	
		•		escriptions s	hown in i	italic	s.			aning Fac		17111	
Date(s) Colle	cted (DI	D/MM/YY):	23/08/10		S	sos	Seed (	Collectio	n Ref. Nun	nber:	RO90B-1	7	
Collector(s):	MATT	BLAKEL	EY-SMITI	H, INSTITU	TE FOR	APP	LIED	ECOLO	GY				
Country:	USA	Ecoregion	n (T,O,B):	3 - Willan Valley	nette	S	tate:	OR	Count	y: Lane			
<b>Location I</b>	Details:	EAGLE'	'S REST, E	EUGENE BI	LM					-			
Lat. (	(dg/min	/sec) (ex: 40	)° 34' 19.5" N	): 43° 5	1' 47.97"	7" N GPS		Used?:	Yes	X If	no, please	e see other side.	
Long. (dg	g/min/se	ec) (ex: 107°	36' 51.54'' W	): 122° 48	: 122° 48' 02.53"			Datum: WGS84					
Elevation	(feet):	944		Lando	wner Det	ails (	Permi	ssion?):	BLM				
HABITAT DA	ATA			<u> </u>				'					
Habitat, Ass Species & Eco Site Desc	ological		NTHEMU	ENING SU M VULGAI						ohoenix, OTENTILLA			
Modifying I	Factors:	NONE											
Land	d Form:	LOWER	SLOPE					Slope°: 3					
La	nd Use:	WILDLI	WILDLIFE HABITAT						Aspect:		SW	7	
G	eology:	UNKNO	)WN										
Soil T	exture:	Clay Si	lt Sand (	Other:				Soi	l Color:				
COLLECTIO	N DAT	'A - If plan	ıt has been	identified	by a spec	cialist	t, plea	se see otl	her side.				
I	Family:	ASTERA	ACEAE					No. of Plants Sampled (min. 50 ): 140					
1	Genus:	WYETH	IIA					No. of Plants Found (approx.): 400					
S	pecies:	ANGUS	TIFOLIA					Area Sampled (acres): 0.4					
Subspecies/	Variety:												
Seeds Collec	ted Fro	m: Plant	ts X										
Plant Habit:			F	orb					P	lant Heigl	nt (feet):	1.8	
Native developmenthis access	nt and 1		SEED WILL BE USED FOR INCREASE PROJECTS ON EUGENE BLM PRAIRIE						ROWOUT	FOR FUT	URE RES	STORATION	
Notes to assi- of pressec flower color, of closely i	d specin , odor, p	nen (e.g. presence											
Common Na	ame(s) c	of Plants:	CALIFOR	NIA COMI	PASSPLA	ANT							
Photograph Ta	aken:	Digital 3		Reference PLANTS Code_Coll. Number_Pic. No.):				Where	Image will	be Filed:			