

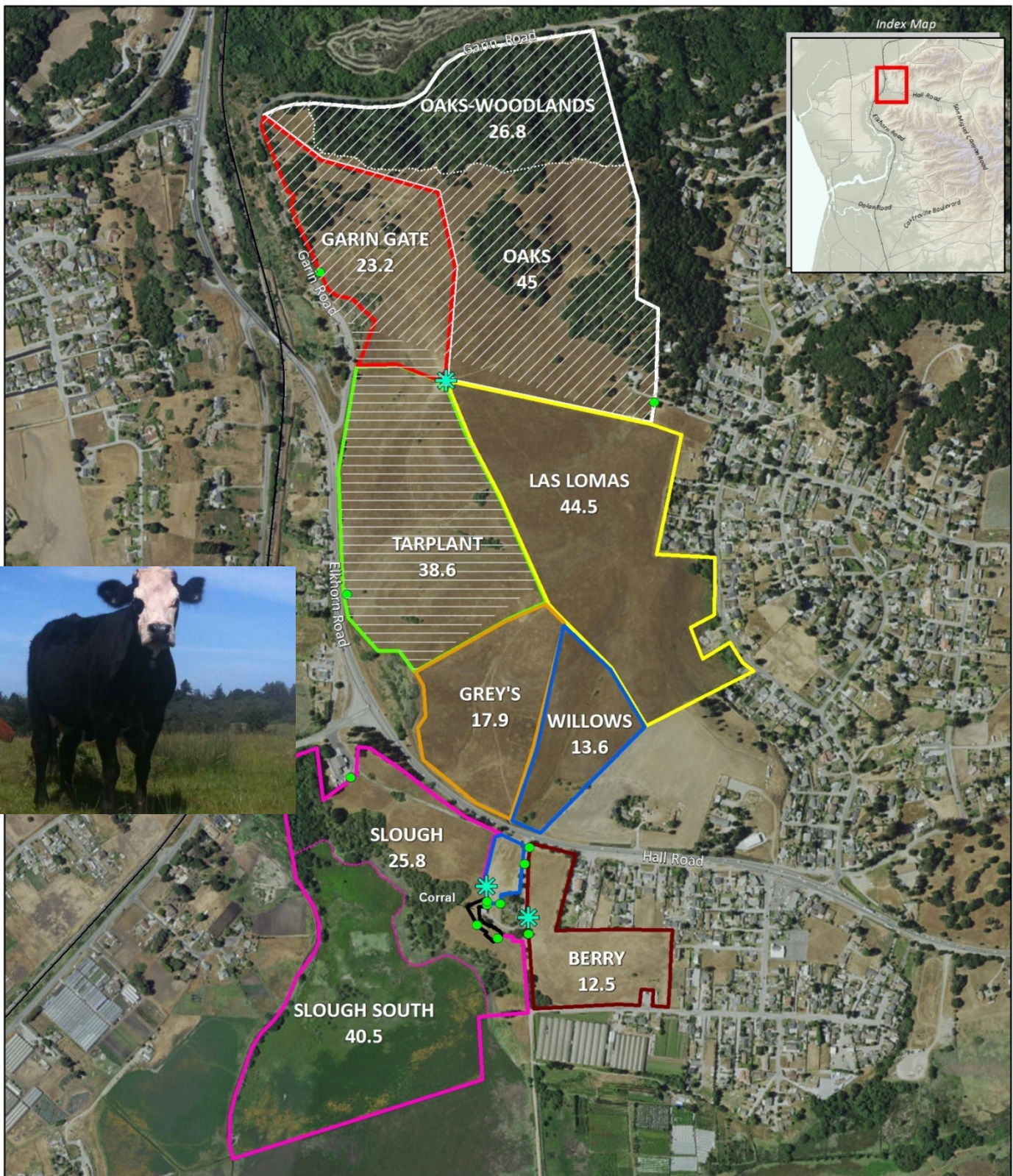


Photo: Kim Hayes

**Population data and management
information for *Holocarpha macradenia*
on the Elkhorn Slough Foundation's Porter
Ranch, Monterey County, CA.**

December 3, 2015

Kim Hayes, Stewardship Director
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**Porter Ranch Pastures
with Easements**
103 Hall Rd.
Watsonville, CA 95076

- Gates
 - ★ Water Troughs
 - Fences
- EASEMENTS**
- TNC
 - WCB

0 300 600 Feet

0 100 200 Meters

Map updated November 2015 NAIP 2014 Aerial Imagery, courtesy of USDA

Porter Ranch Grazing Time Period/Guidance:

January - February

Once grass is actively growing again, graze to keep grass competition down; minimize soil impact since the species will be germinating

March - April

Graze to keep grass competition down

April - May

If HOMA is still in early flower head formation, graze pasture to focus cattle on Harding grass flower heads before they drop seed; monitor to ensure only light impact to HOMA flower heads-pinching off the first flowering shoots of HOMA can stimulating increased flowering (watch out for soil impacts and full HOMA plants being pulled out)

June - October

No grazing

November - December

After seed set and seed dropping, graze enough to work seeds into the soil and expose bare ground



Photo: Ken Collins

Goal: assist cattle in creating a higher animal impact than normal in HOMA area.

**Alfalfa trial Oct/25-27/2012
by Ken Collins and Kim Hayes**

Attention was given to break up 2 bales of alfalfa and disperse over majority of tarplant areas.

Each day we focused on a different area, starting higher up drainage and moving downstream. Both sides of drainage were worked.

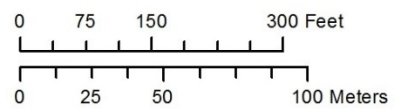
By 10/30/12 all the alfalfa was gone, the remaining vegetation in the pasture was much more trampled and/or grazed than was typical in past years.

Mission accomplished.



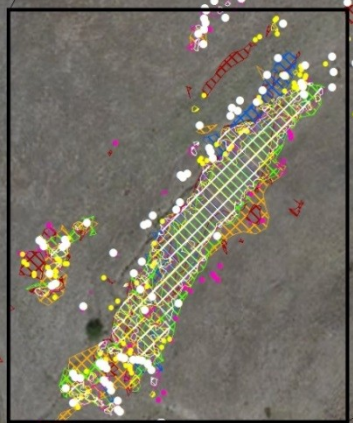
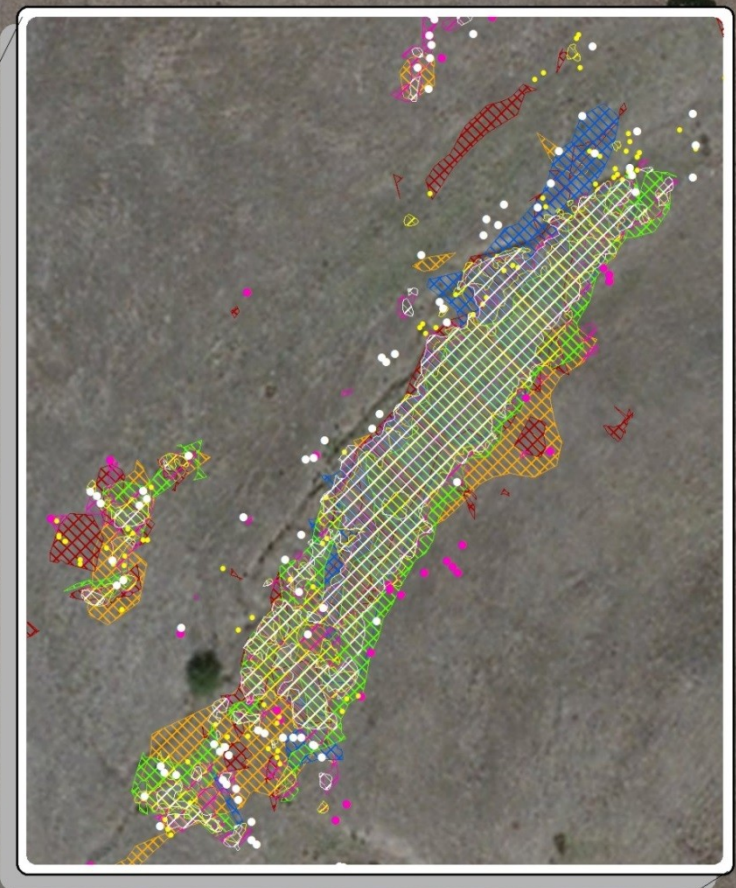
ESF Porter Ranch Santa Cruz Tarplant Survey








Year	Mapper	Counter	Acres	Plant Count
2015	C. Endris	K. Hayes	0.35	10,892



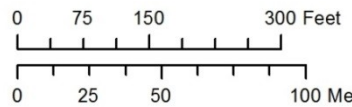
Map updated August 2015

2010 Aerial Imagery, courtesy of Bing Maps



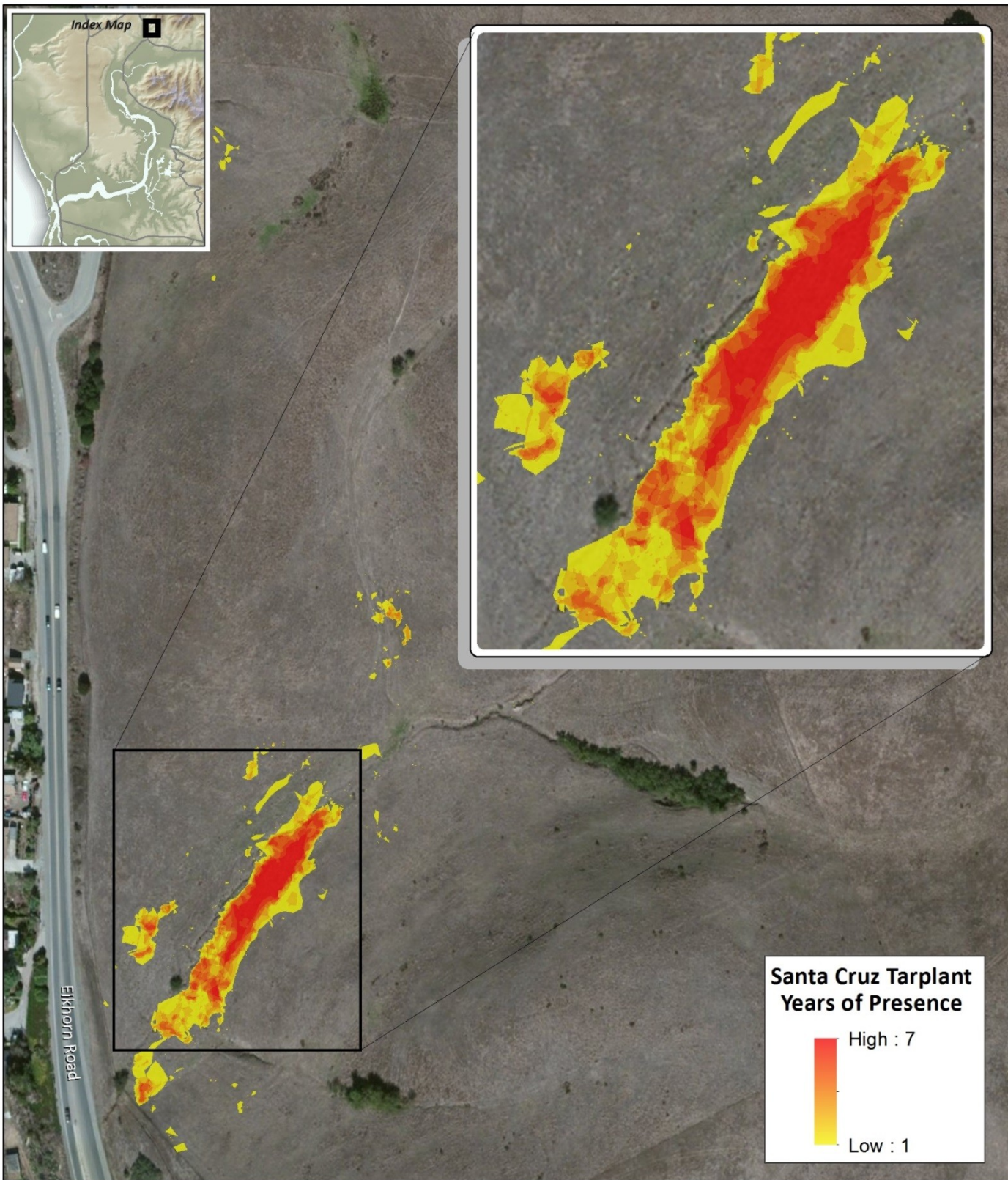
Symbol	Year	Acres	Plant Count
Not Mapped	2006	NA	330
	2007	0.58	2275
	2008	0.41	NA
	2010	0.40	2202
	2011	0.44	NA
Not Mapped	2012	NA	<300
	2013	0.44	8234
	2014	0.35	12,000
	2015	0.35	10,892

ESF Porter Ranch Santa Cruz Tarplant Surveys 2006 - 2015

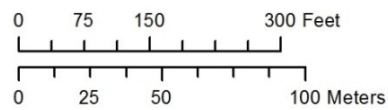


Map updated November 2015

2014 NAIP Imagery



**ESF Porter Ranch Santa Cruz Tarplant
Persistence Map
2006 - 2015**



Map updated November 2015

2014 NAIP Imagery