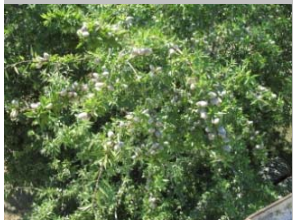


Season Outlook for NOW Damage in Almonds and Pistachios in the Southern SJV

Brad Higbee

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Paramount Farming Co.
Bakersfield, CA, 93306

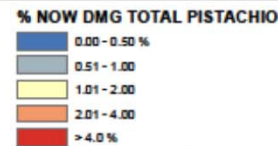
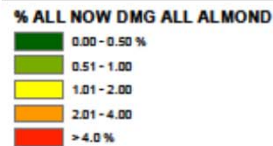


How can one determine what level of NOW pressure can be expected in a given year?

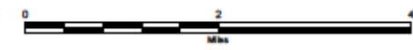
1. Prior Year damage
2. Overwintering conditions
3. Mummy load and infestation level
4. Heat accumulation
5. Trap data – Current and Historical
 - Egg
 - Pheromone – synthetic lure or virgin moths

1. Prior Year damage –
map or list damage levels
from previous year.

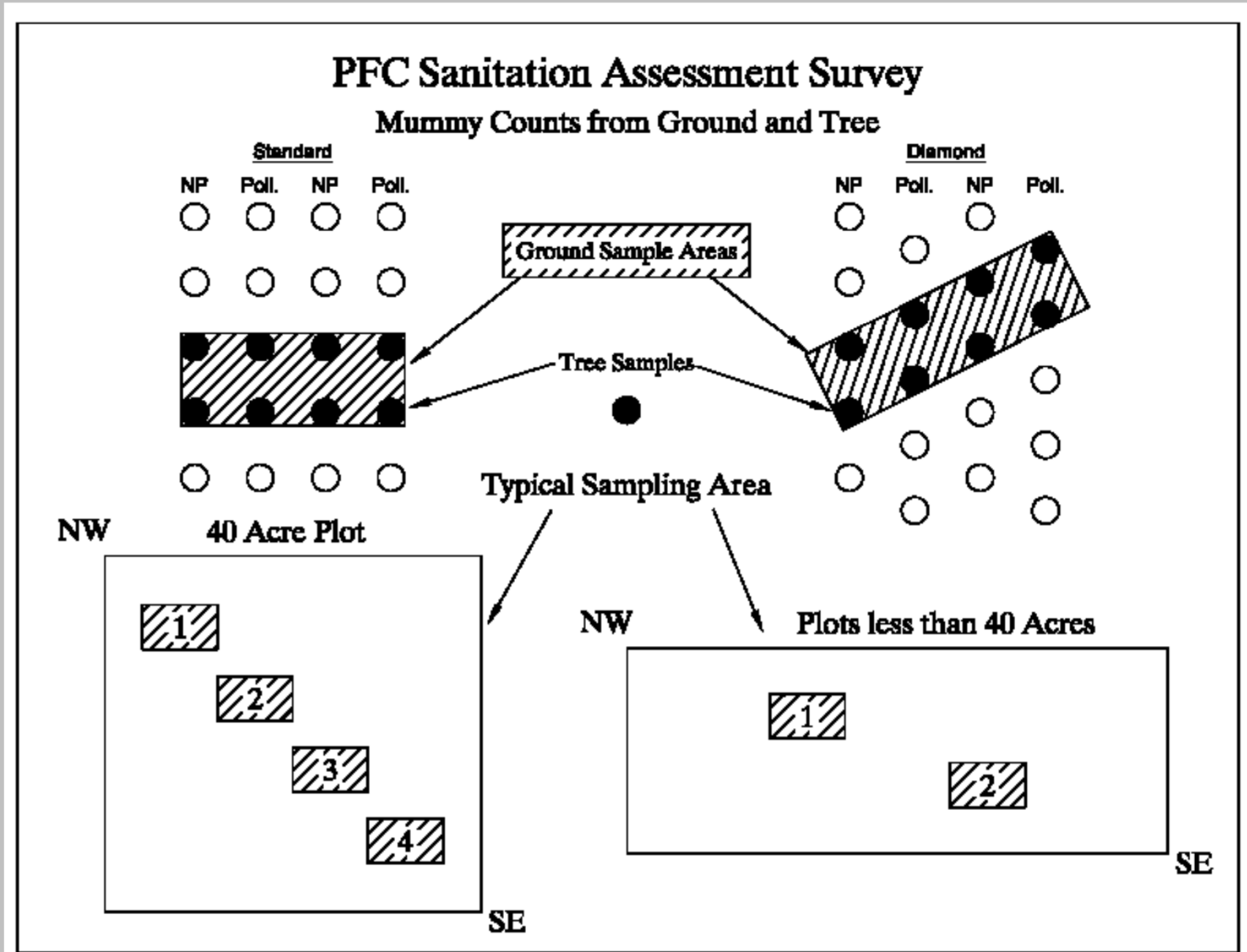
NOW damage from
previous year is a
good indicator of
current year risk!



**2012 Belridge
NOW Damage
All Varieties (Alm)
All Shakes (Pist)**

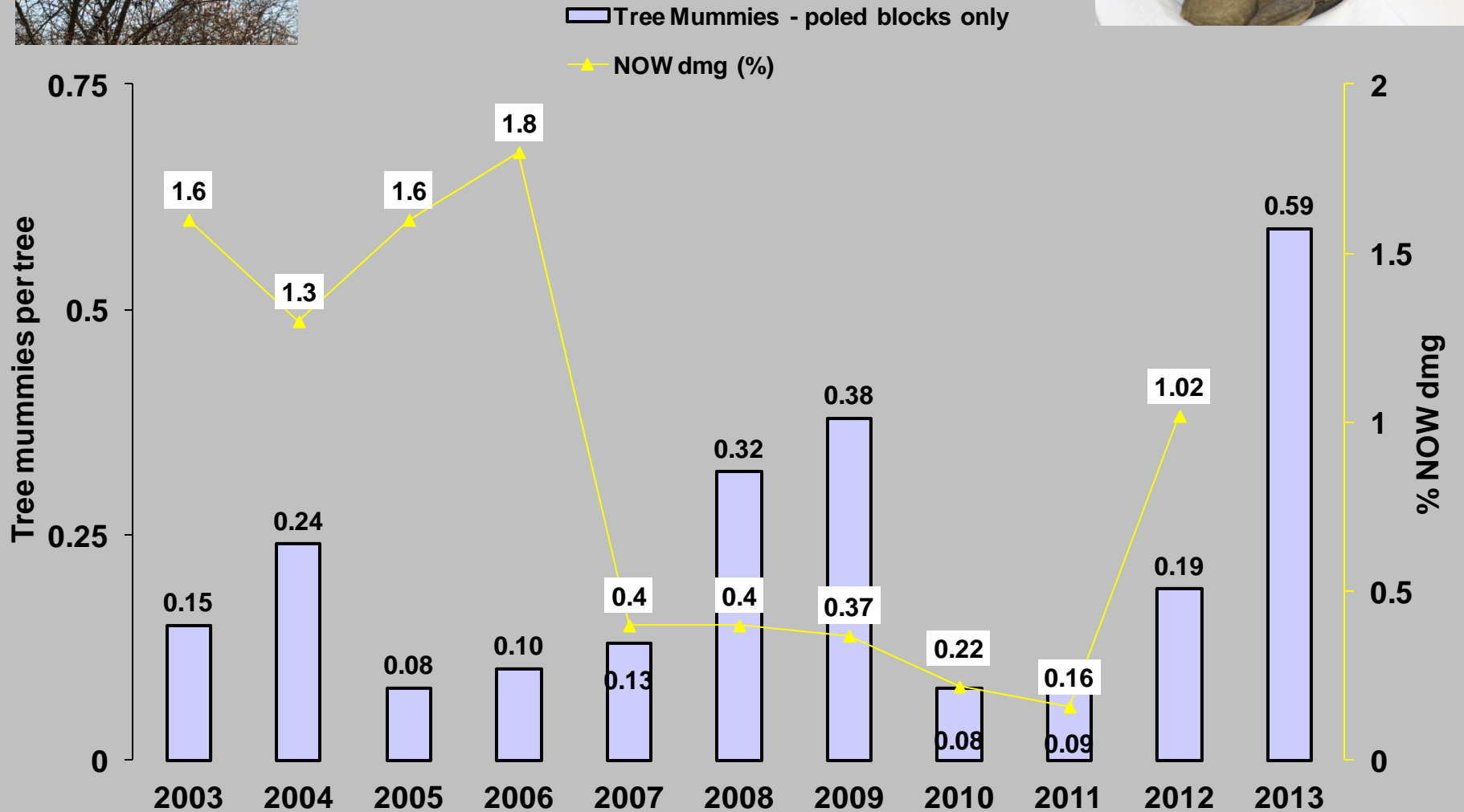


3. Mummy load and infestation level – Count mummies and determine infestation level



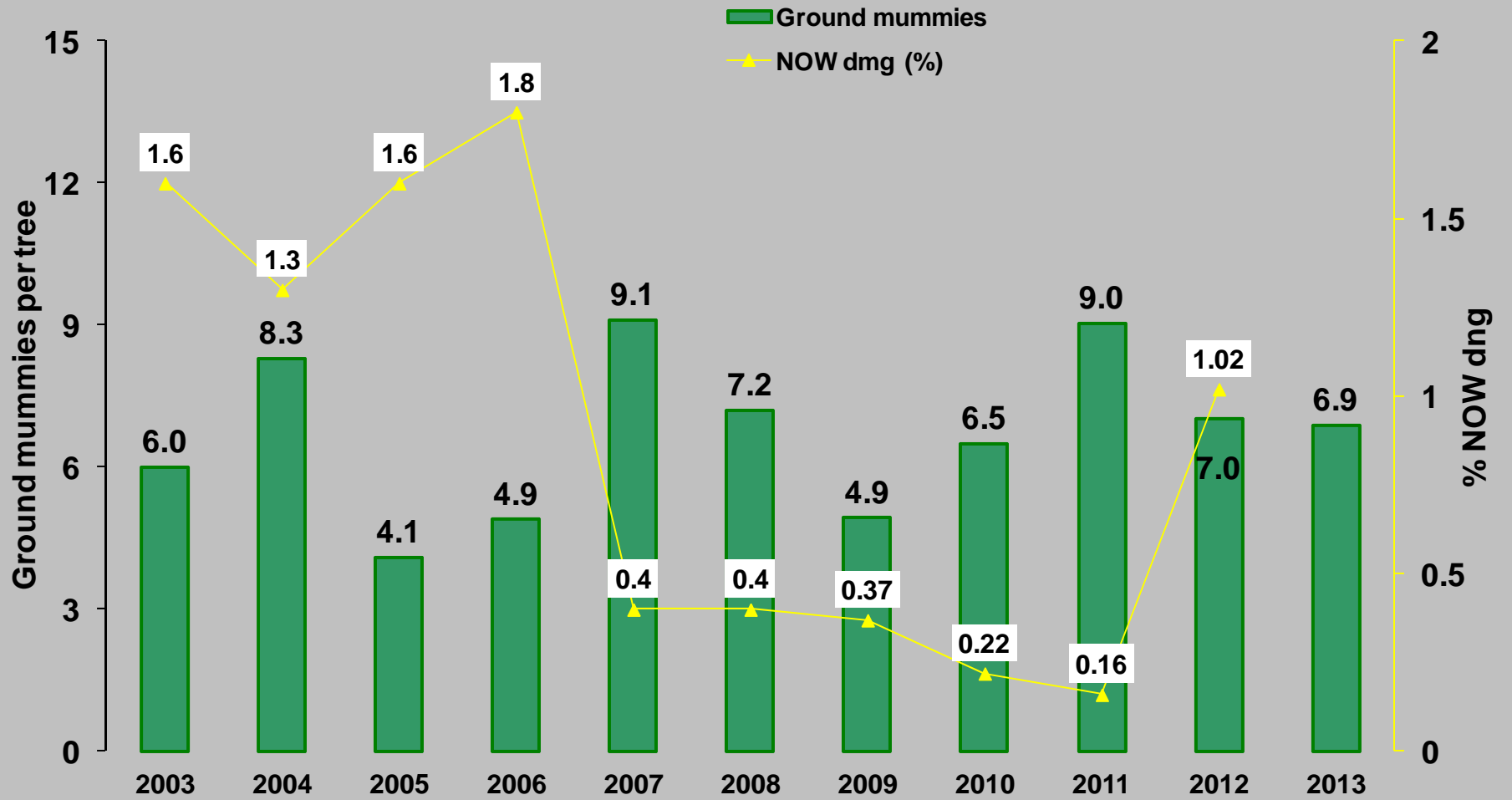


Sanitation Survey Results Almond Tree Mummies



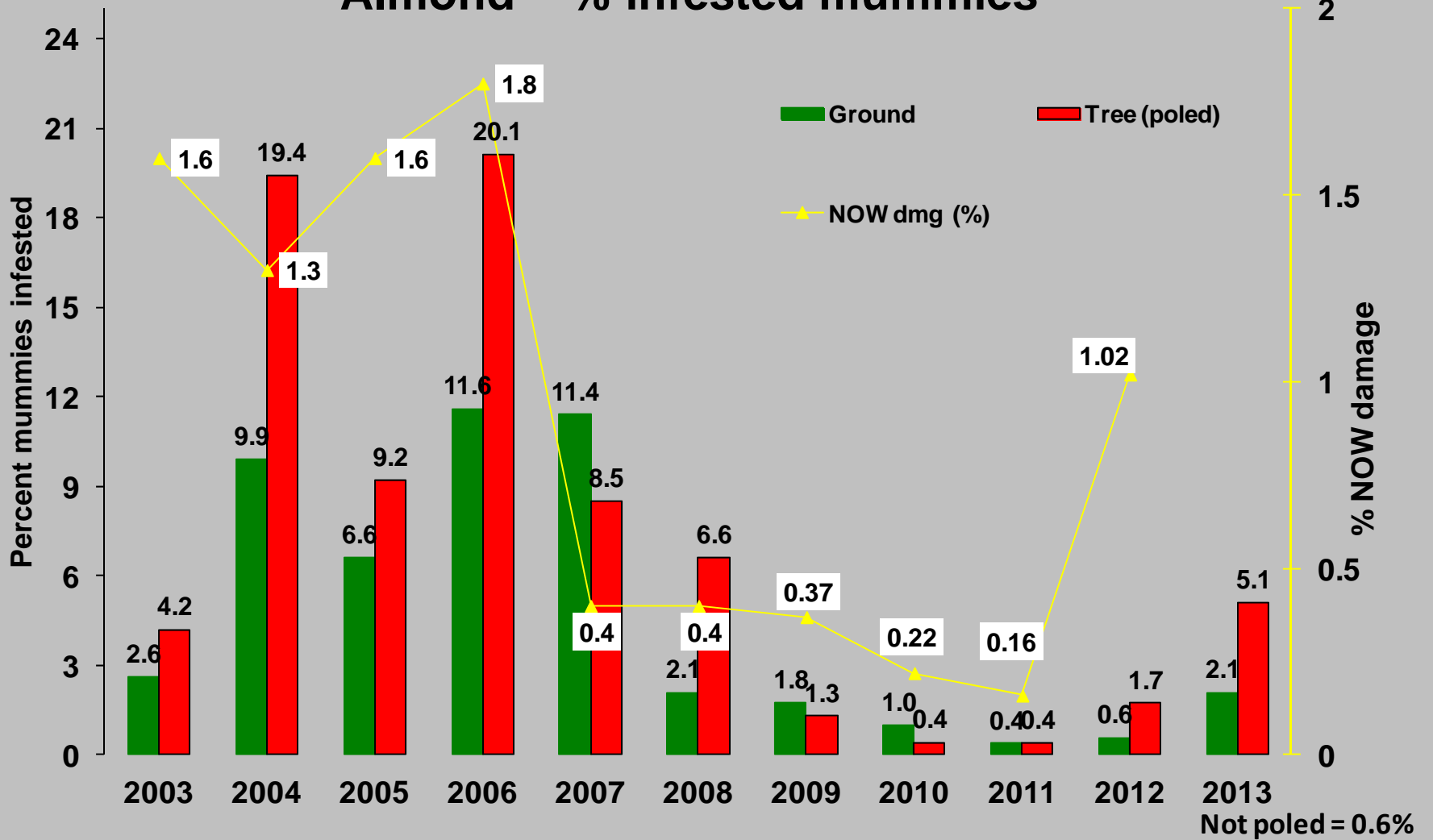
Sanitation Survey Results

Almond Ground Mummies



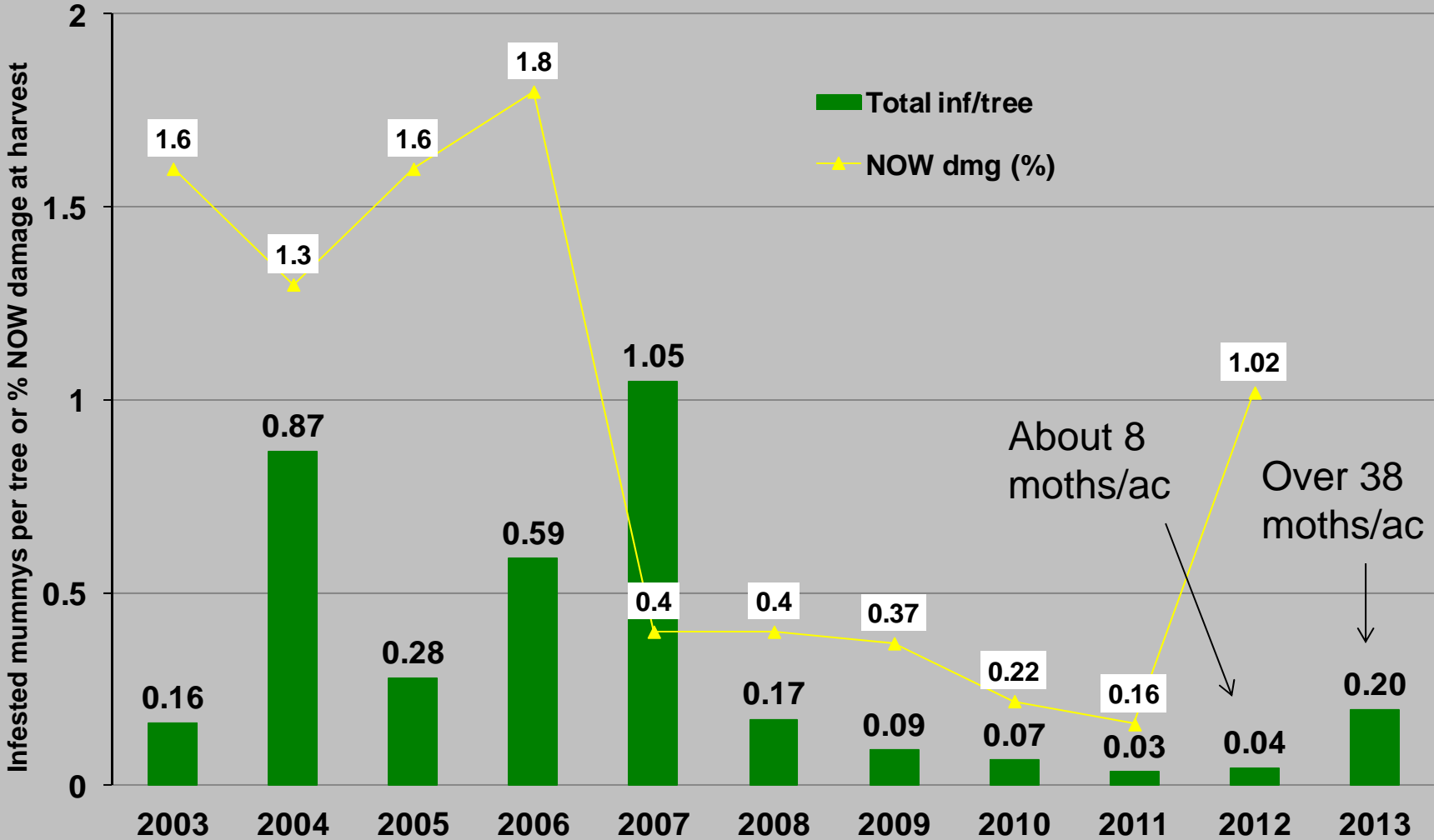
Sanitation Survey Results

Almond - % infested mummies



Sanitation Survey Results

Almond - infested mummies/tree



4. Heat accumulation – about 7-9 days ahead of 2012

#146 Lost Hills	From Jan 1			
Year	1-Feb	1-Mar	1-Apr	1-May
2002	14	118	275	530
2003	57	106	295	461
2004	13	74.5	358	686
2005	24	95.5	258	452
2006	24	125	185	379
2007	26	101	353	625
2008	24	96.5	257	491
2009	52	127.5	278	534
2010	33	94	230	398
2011	11	58.4	181	388
2012	64	148	293	554
2013	27	96	312	650
mean	30.75	103.37	272.92	512.33

	#146 Lost Hills	
Year	Biofix	From Jan 1
2002	3/16	165
2003	3/9	136
2004	3/10	122
2005	3/10	143
2006	3/27	172
2007	3/14	192
2008	3/15	170
2009	3/15	170
2010	3/22	175
2011	3/28	147
2012	3/7	172
2013	3/11	140
mean	3/16	158.7

Lost Hills – 1050 dd

2010: June 29

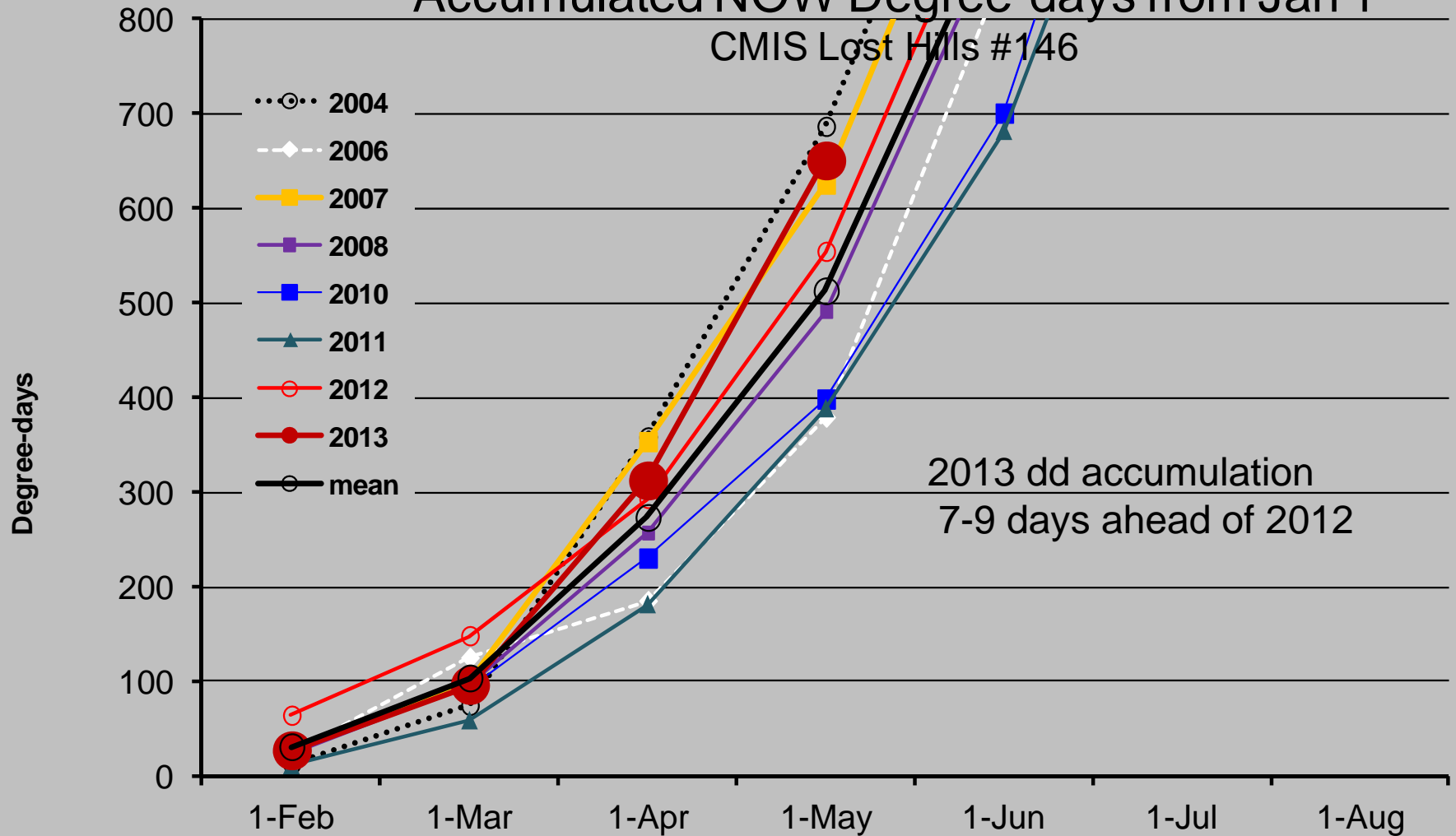
2011: July 2

2012: June 15

2013: ??

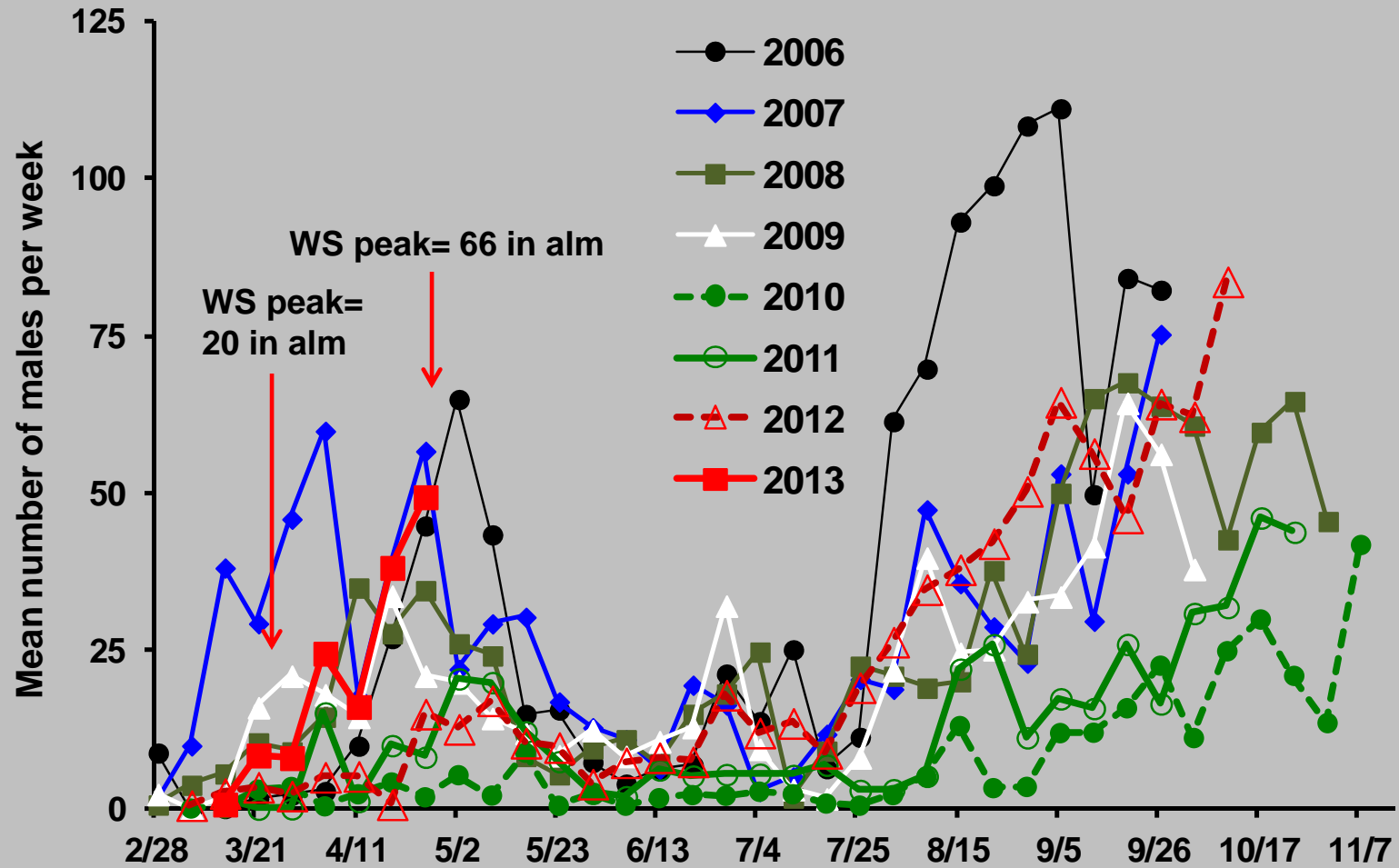
Accumulated NOW Degree-days from Jan 1

CMIS Lost Hills #146



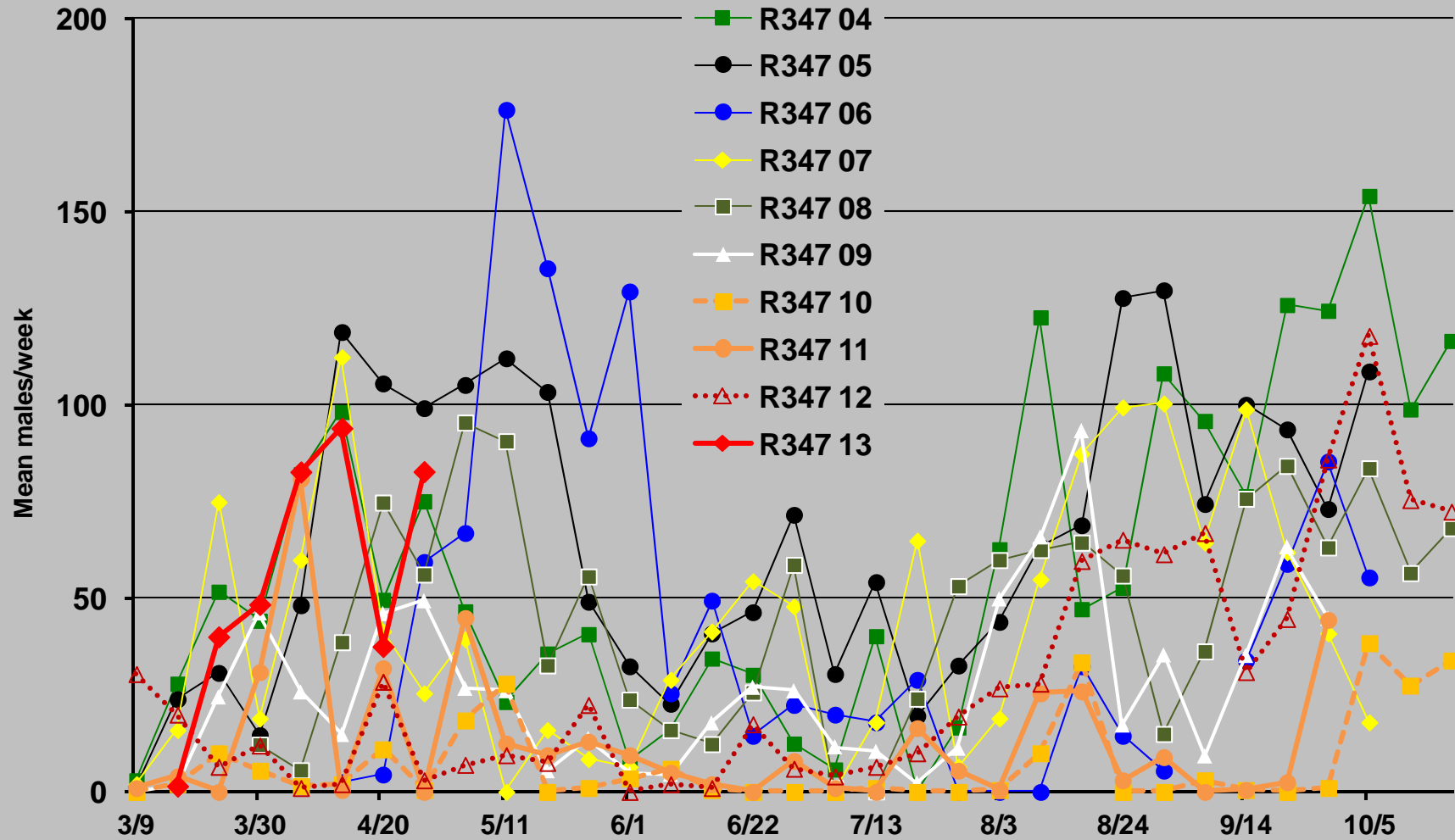
5. Trap data – Current and Historical

Almond Monitoring Sites NOW Pheromone Traps

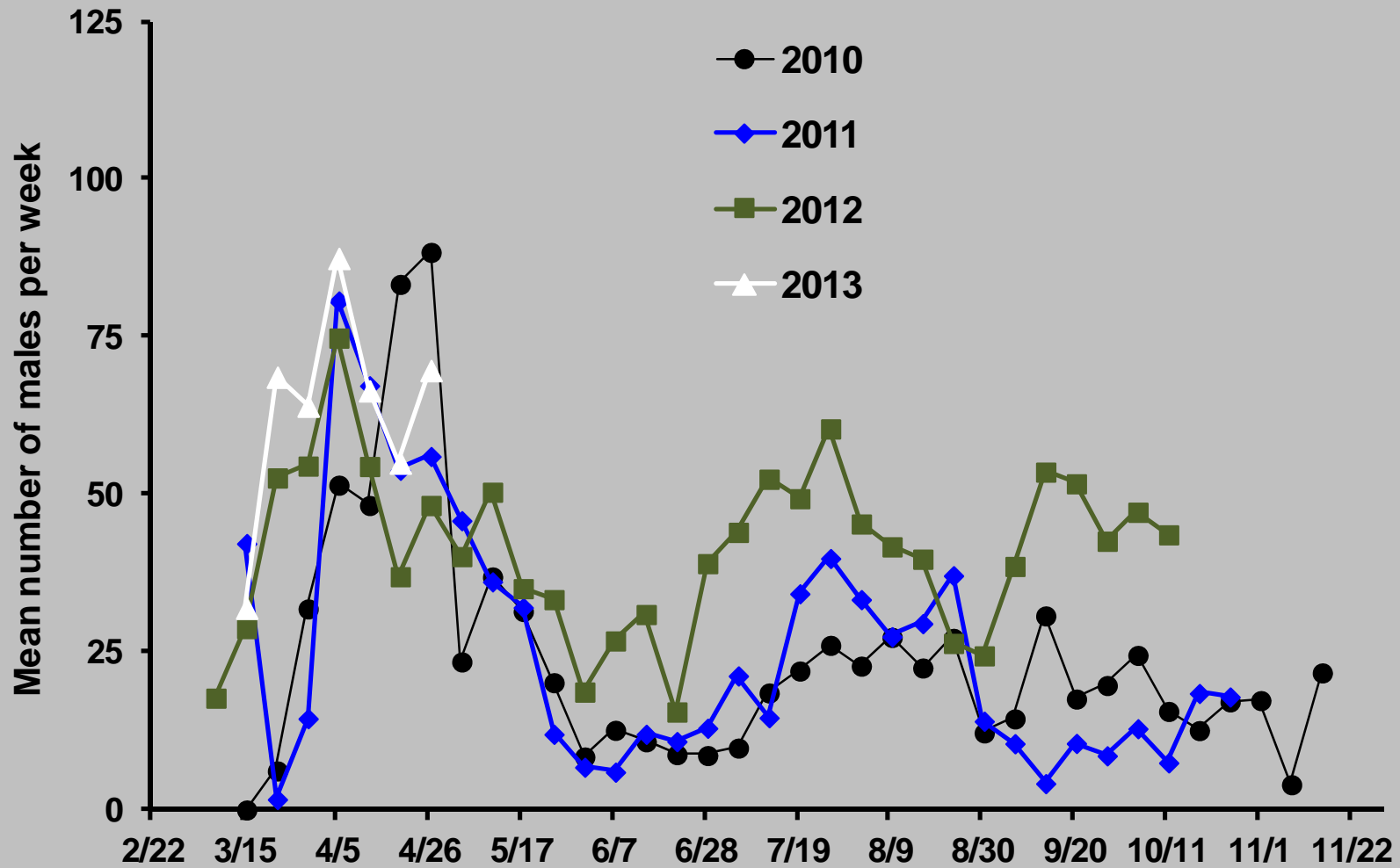


Indicator or "Bellwether" Ranch

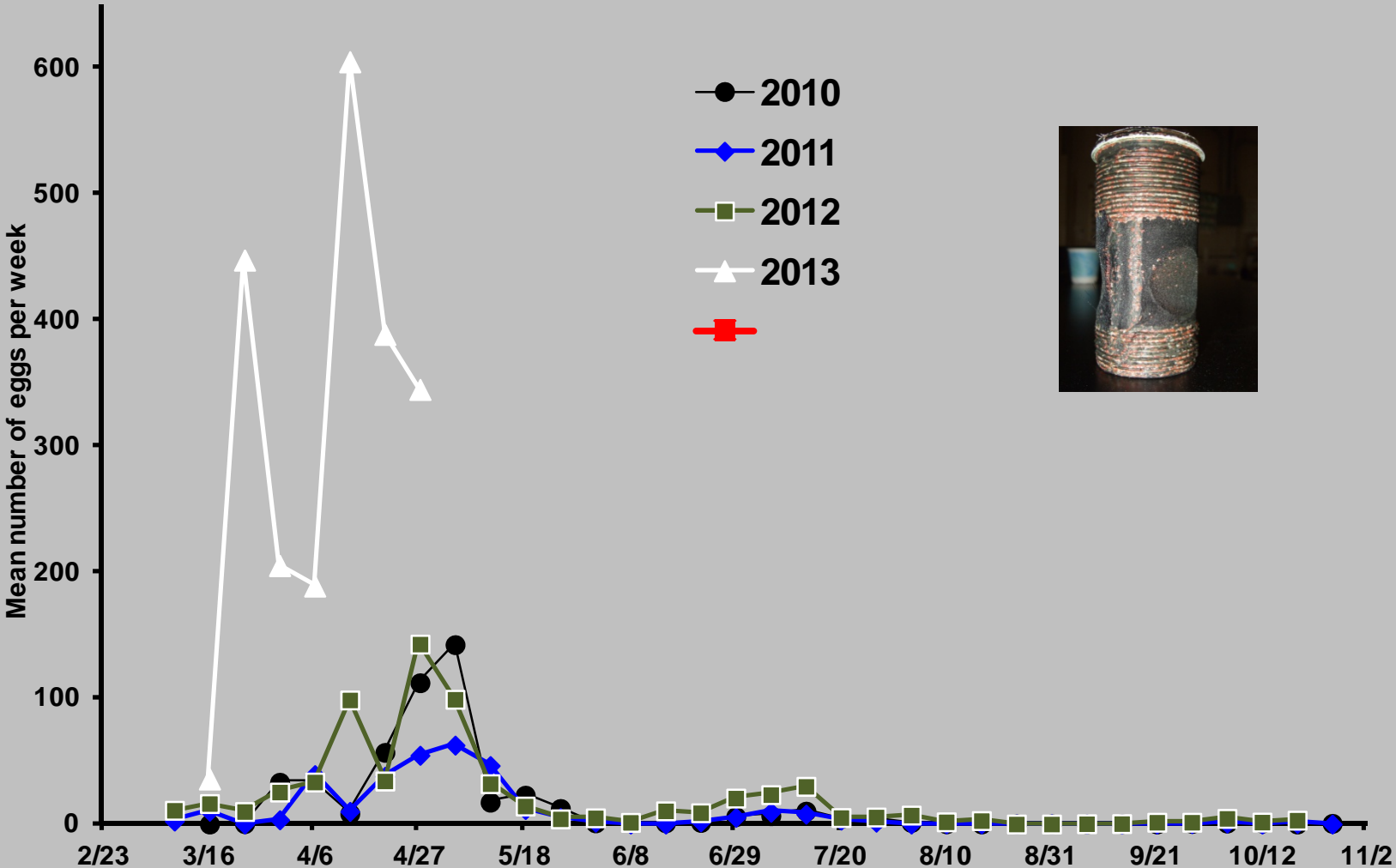
Pheromone Traps Almond - R347



Pistachio Monitoring Sites NOW Pheromone Traps



Pistachio Monitoring Sites NOW Egg Traps - No CAO



The NOW pressure in early 2013 is the highest I have ever seen!!

Due to trap saturation in pheromone traps, NOW levels tend to be underestimated at high pop levels.



NOW pops are very HIGH

- Are they very high everywhere? No, but there are tools that you can use to evaluate.
- If your pops are high - It will be a good year to have an aggressive program!
- Damage prediction calculator:
<http://www.almondboard.com/AboutTheAlmondBoard/Pages/Calculators.aspx>