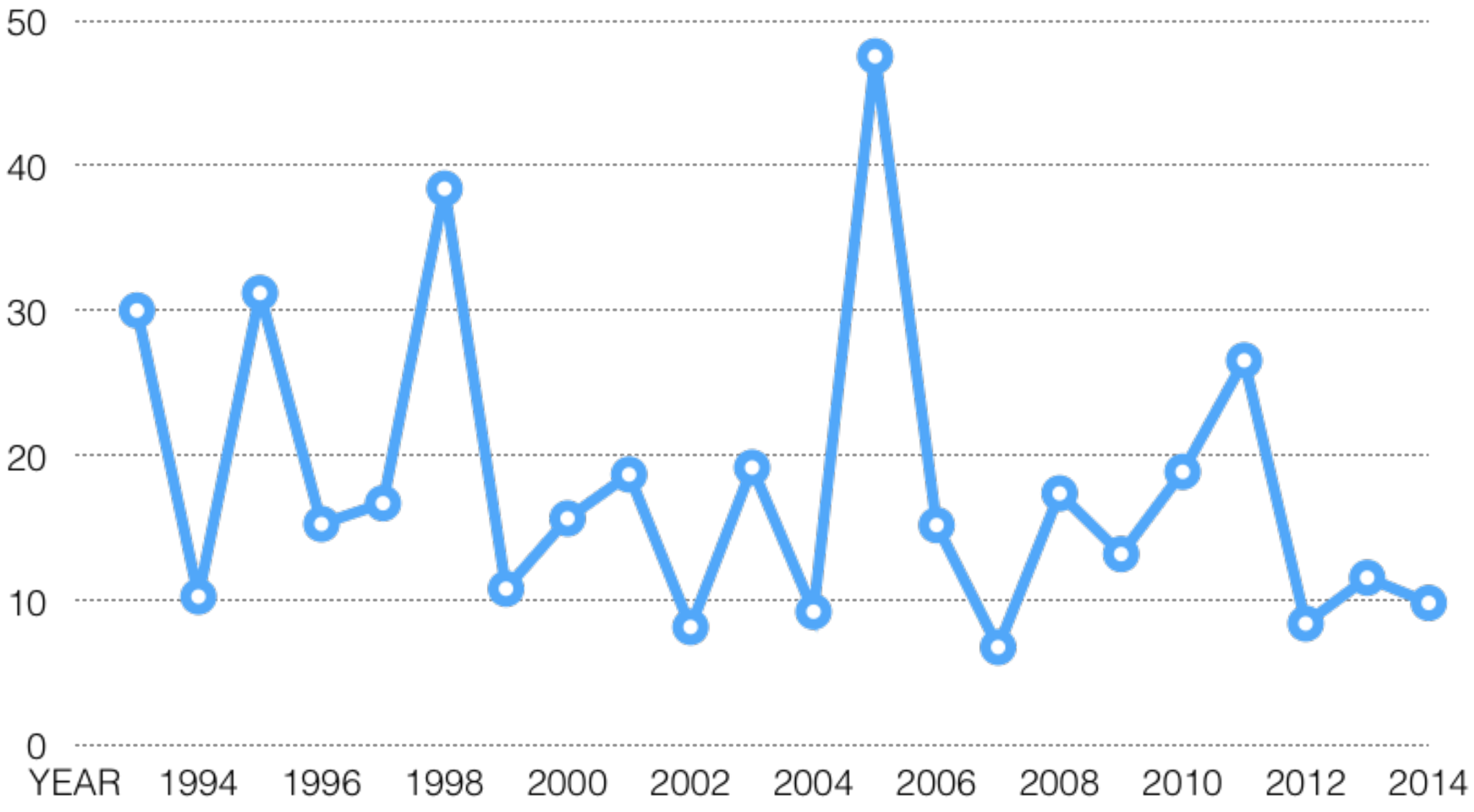
Drought Impact on Pollinators

by: William Lewis, President CSBA

Drought Impact on Pollinators

- Nectar produced is directly proportional to rainfall
- More Fires = Complete Loss of Forage; Bees help reseed burned areas reducing erosion
- Lack of water is killing permanent crops that feed bees
- Beekeepers are forced to go to less safe irrigated crops to feed bees or feed less nutritious sugar or both (oranges, avocados, cotton, alfalfa)
- In drought years, bee losses are greater during almond pollination. We don't know why. Study needed.

Inches of Rain, Little Tujunga Canyon



- Fires = Complete Loss of Safe Forage
  Bees are a huge benefit to helping reseed areas before and after a fire, thus reducing erosion

Photo 2014 - Merek Fire 2008, Station Fire 2009

photo

dead orange trees

Losses in Almonds seem to be greater in dry years

- Study is needed
- Unregulated fungicide,IGR and adjuvant tank mixes are killing bees
- EPA Labeling is the problem and beekeepers were given no hope that there would be improvement anytime soon(March 24, 2014 mtg)
- Testing by pesticide manufacturers won't be completed until 2018 at earliest (results will be biased)
- University testing to date(IGR-Dimilin) has shown detrimental effects

Drought Causes Beekeepers to Dodge Pesticides

- Irrigated crops can be a toxic soup of pesticides
- Beekeepers frequently move bees around the CA Central Valley dodging spray calls

beekeepers need

- Diverse diet for healthy bees
- 1000 new locations to feed 100,000 honey bee colonies
- Easier access, less red tape, fast track process to obtain access to forest and prairie locations with lots of forbs

CSBA is Working to Improve Forage for Bees

- Meeting with Private and Public Land Owners in Nov. 2013
- Subsequent meetings with Land Trusts
- Collaboration with "Pollinator Partnership" on CDFA Specialty Crop Grant Proposal
- Proposed Assembly Bill 2185 will require public land managers to consider bees in their future land use plans
- Goal is 1000 new locations to feed 100,000 honey bee colonies
- CSBA collaborates with "Project Apis M" that has Grant to supply seed to growers to plant forage for bees between rows.