

A case study of man versus nature

Roof Rats Invade Phoenix!

Al Brown



Rattus rattus
aka. roof rat

“Rufus”

















Tested 20 Rats for Tularemia, Hanta Virus and Plague



Rodenticide

- Bromadiolone
- Second generation anticoagulant
- <http://npic.orst.edu/ingred/bromadiolone.html>
- Safety Data Sheet:
https://www.bellabs.com/images/uploaded_files/files/0000/0955/12455-69_Contrac_Rodenticide_0116.pdf



Approximately 9000 Bait Stations Constructed in 2 days



Approximately 6100 Bait Stations in Service



Over 3000 Pounds of Bait in Service





59 Active Bait Stations





Community Involvement Needed





Rats eat almost anything

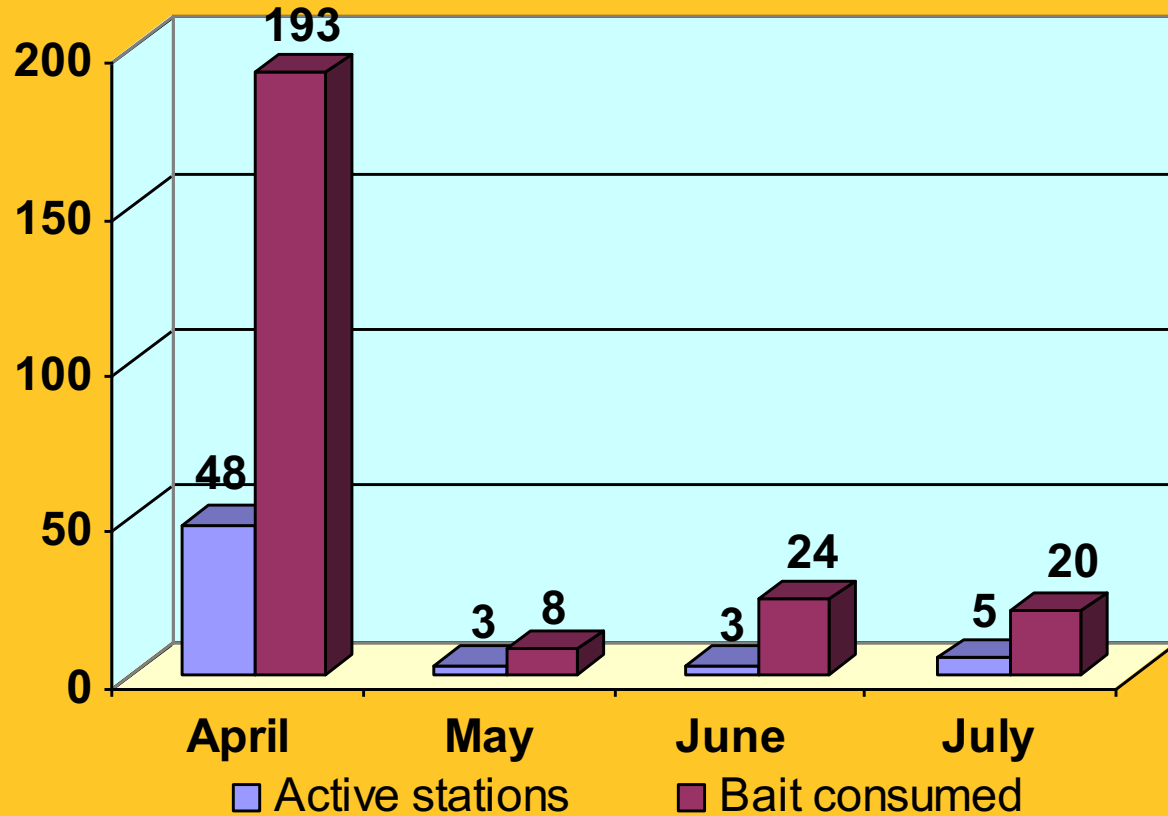


Access limitations

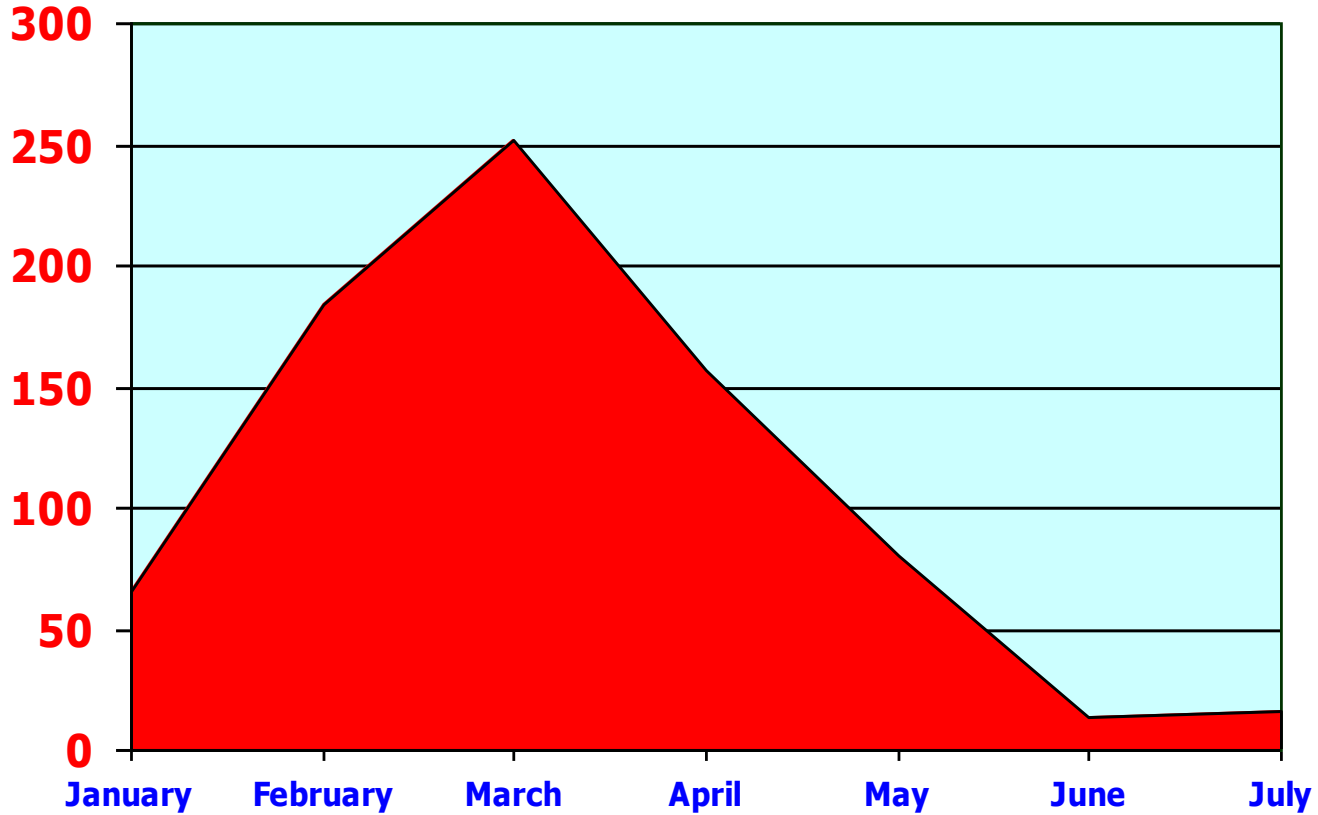




Roof Rat Bait Consumption Chart, 2002



Roof Rat Complaints from the Arcadia Area, 2002



**Total bait
consumed,
March through
July, 2002:
245 ounces**

**Total number of Complaints
from the Arcadia Area,
March through July, 2002:
776**



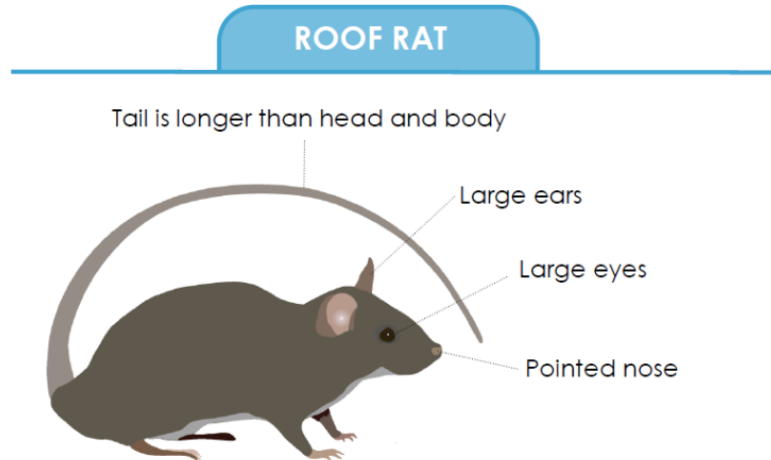
Fast Forward to 2021

- Bromadiolone became more regulated in 2008 due to non-target species impacts
- Source reduction is preferred over rodenticide application
- Community action resulted in managing the problem
- Use non-chemical controls before pesticide thresholds occur
 - Habitat modification
 - Exclusion
 - Snap traps
 - Predators
- Phoenixians are now coexisting with *Rattus rattus*



References

- California Department of Pesticide Regulation, 2021, <https://apps.cdpr.ca.gov/serp.htm?q=rodenticides>
- Maricopa County Environmental Services Department, <https://www.maricopa.gov/632/Vector-Control>
- U.S. EPA, 2021, <https://www.epa.gov/rodenticides>
- U.S. EPA, 2021, <https://www.epa.gov/rodenticides/restrictions-rodenticide-products>



Source: California DPR, 2020-2021
School Recordkeeping Calendar

Discussion/Questions

