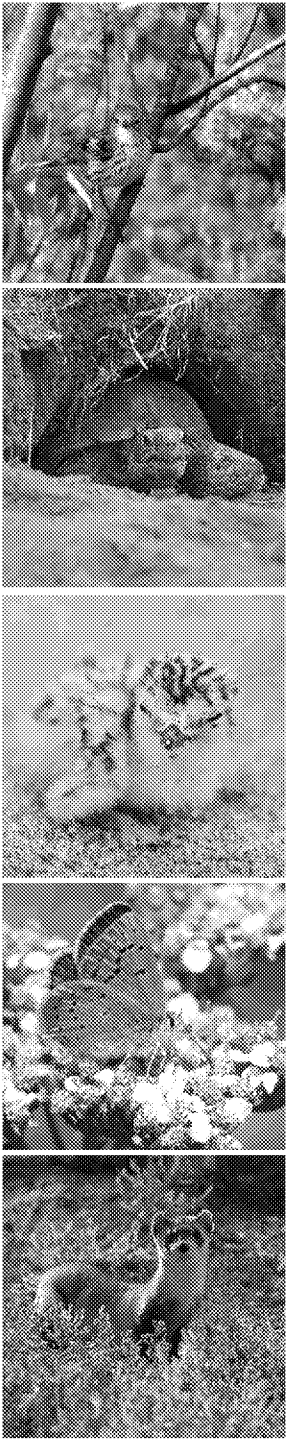
Non-Agricultural Uses

Identifying usage data sources

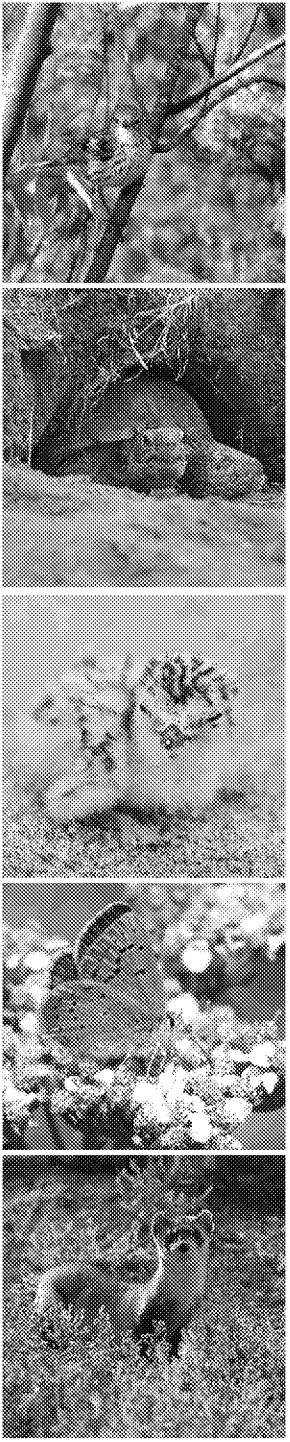
February 26, 2018



Non-Agricultural Uses

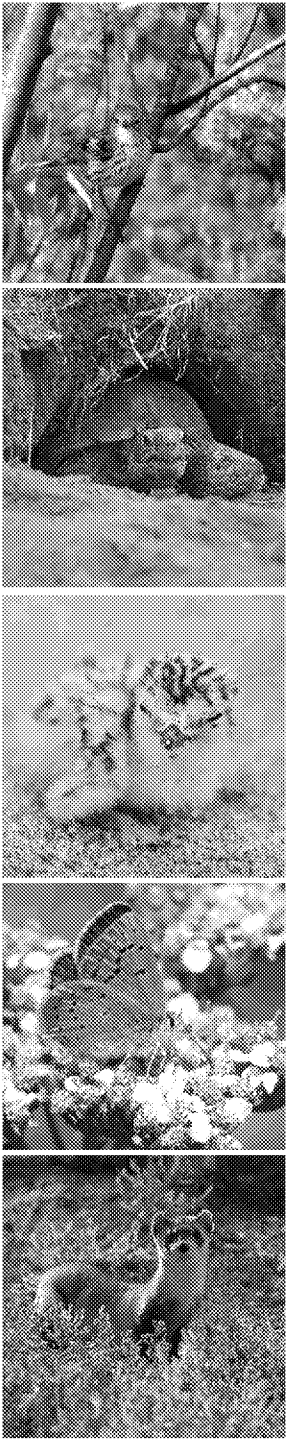
Goal

- To identify potential sources of usage data for non-agricultural applications, a process for obtaining the data, and a path forward if there are no data.



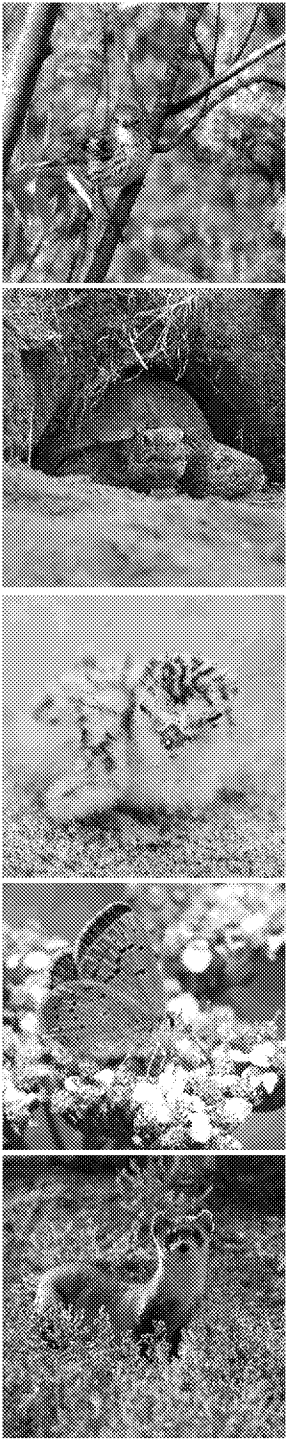
Non-Agricultural Uses

- Nurseries
- Wide-area use
- Managed forest
- Pasture
- Right-of-way
- Developed and open-space developed
- Golf courses
- Mosquito adulticide
- Other products
  - seed treatment
  - granular
  - bait



Background

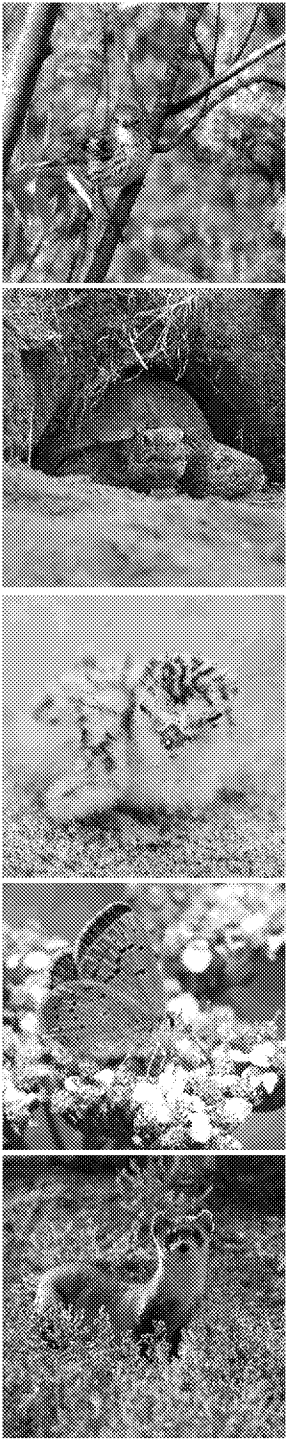
- The BEAD usage data does not include most non-agricultural uses.
- Some labels allow for high application rates and/or unrestricted frequency of application.
- Non-agricultural uses can have high overlap with species ranges.



Example Species

Yellow-billed Cuckoo (*Coccyzus americanus*)

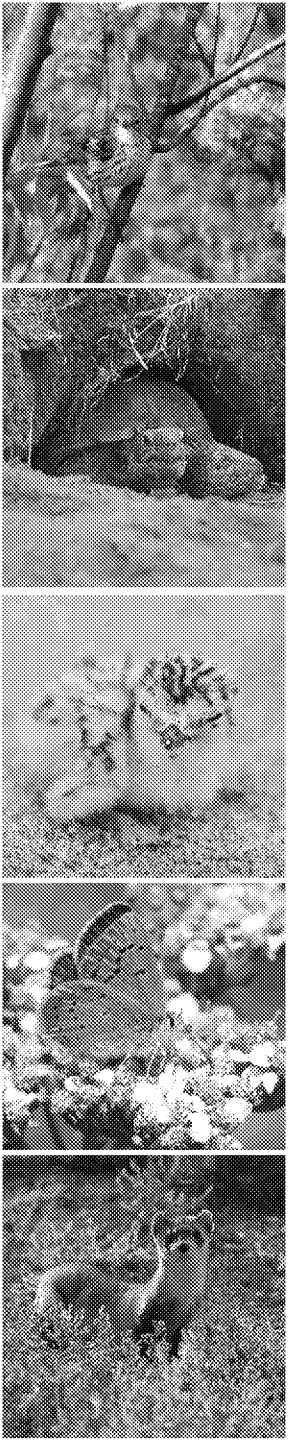
- Managed forest = 16.4% overlap (chlorpyrifos)
- Pasture = 9% (malathion)



Example Species

Red Hills salamander (*Phaeognathus hubrichti*)

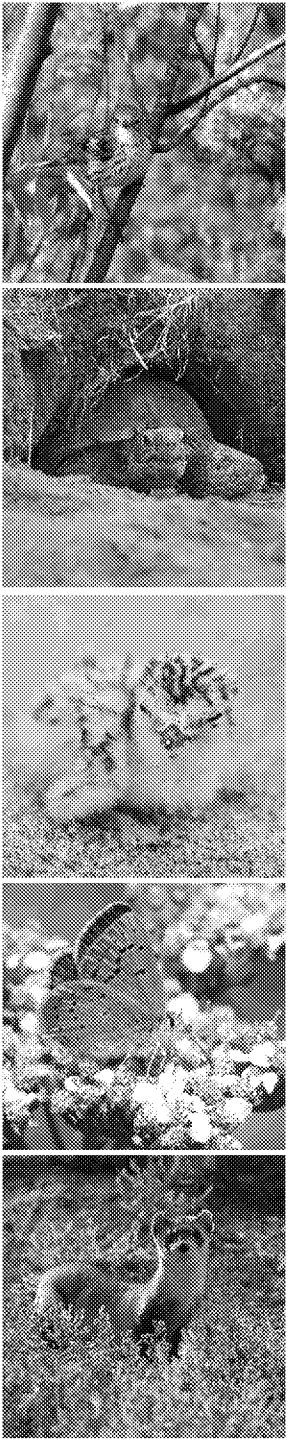
- Managed forest = 31% (chlorpyrifos)



Example Species

Coastal California gnatcatcher (*Polioptila californica californica*)

- Right-of-way = 32.3% (chlorpyrifos)
- Developed = 29% (malathion)
- Pasture = 13% (malathion)
- Open space developed =11% (malathion)

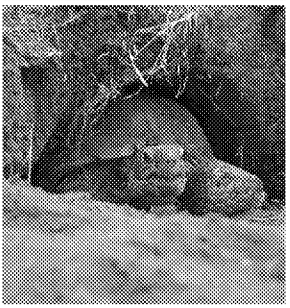


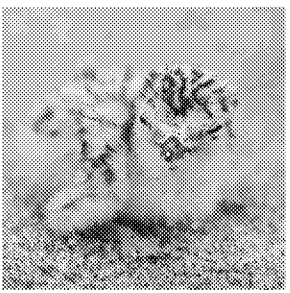
Example Species

Bog turtle (*Clemmys muhlenbergii*)

- Developed = 10%
- Developed open space = 13%
- Right-of-way = 17%
- Pasture = 14%
- Managed forests = 6%

(malathion and chlorpyrifos)

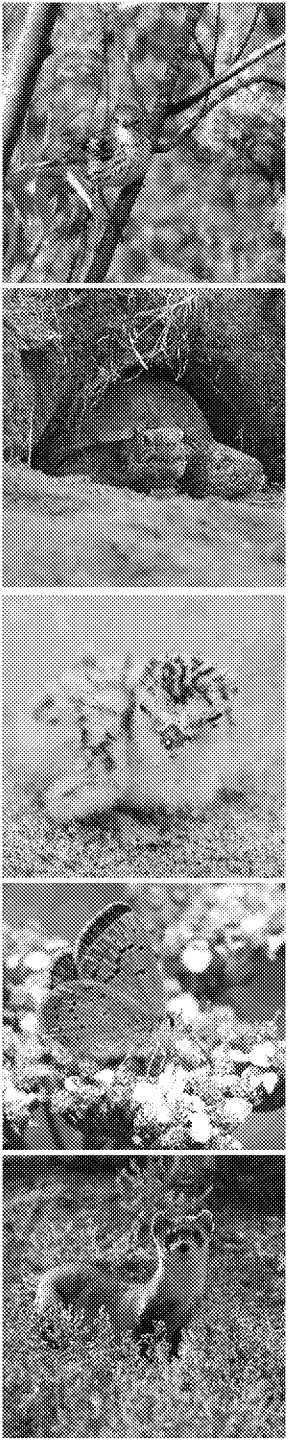




Example Species

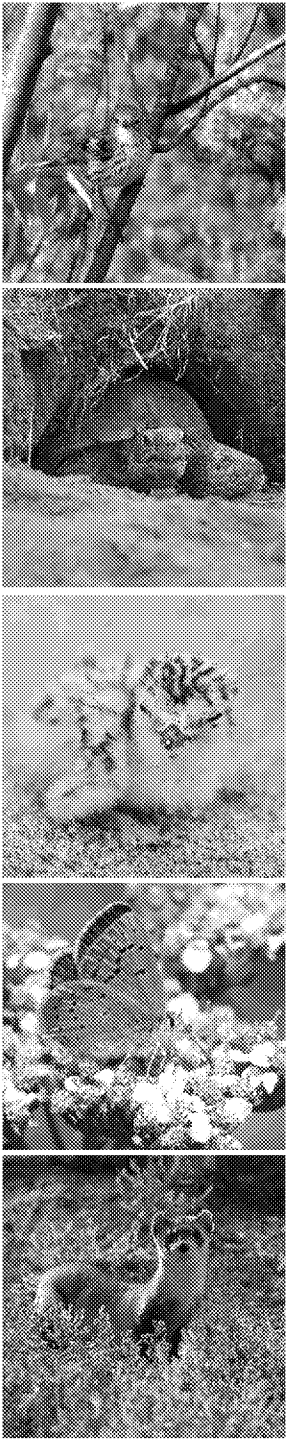
San Joaquin kit fox *(Vulpes macrotis mutica)*

- Pasture = 41% (malathion and chlorpyrifos)
- Open space developed = 5% (malathion)
- Developed = 4% (malathion)



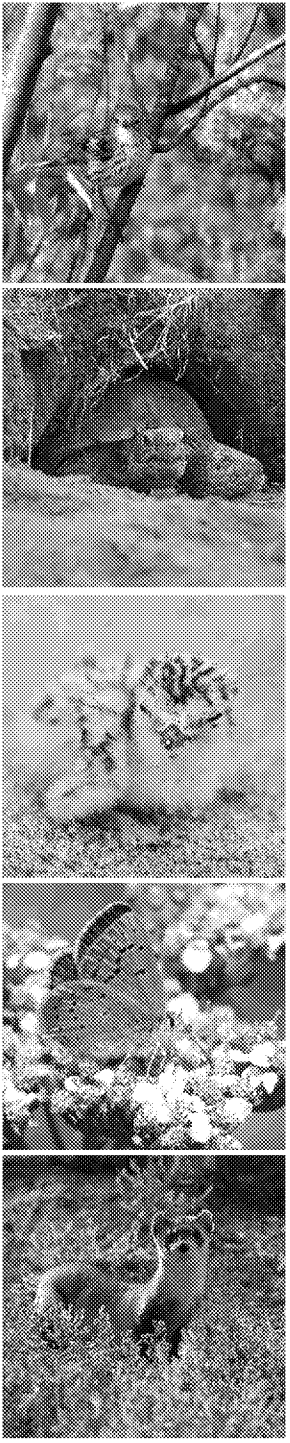
Data Needs

- Managed forest – USDA Forest Service, state forest agencies?
- Pasture – State extension office, cattle growers association?
- Right-of-way – state or federal transportation authorities?
- Developed and open-space developed – ??



Data Needs

- Golf courses – turf and golf course management extension office?
- Nurseries – Nursery Growers Association?
- Other products:
  - seed treatment – USDA?
  - granular
  - bait



Data Needs

- Mosquito adulticide – mosquito control districts for data on where it is applied.
  - data can be collected from the State mosquito control districts (FL, CA, WA), others?
  - Use of American Mosquito Control Association data?
- Wide-area use – data sources?
- We recommend working with the registrants (applicants) for additional usage information?