

CDFW Products Being Developed to Manage California's Predators

The Coyote

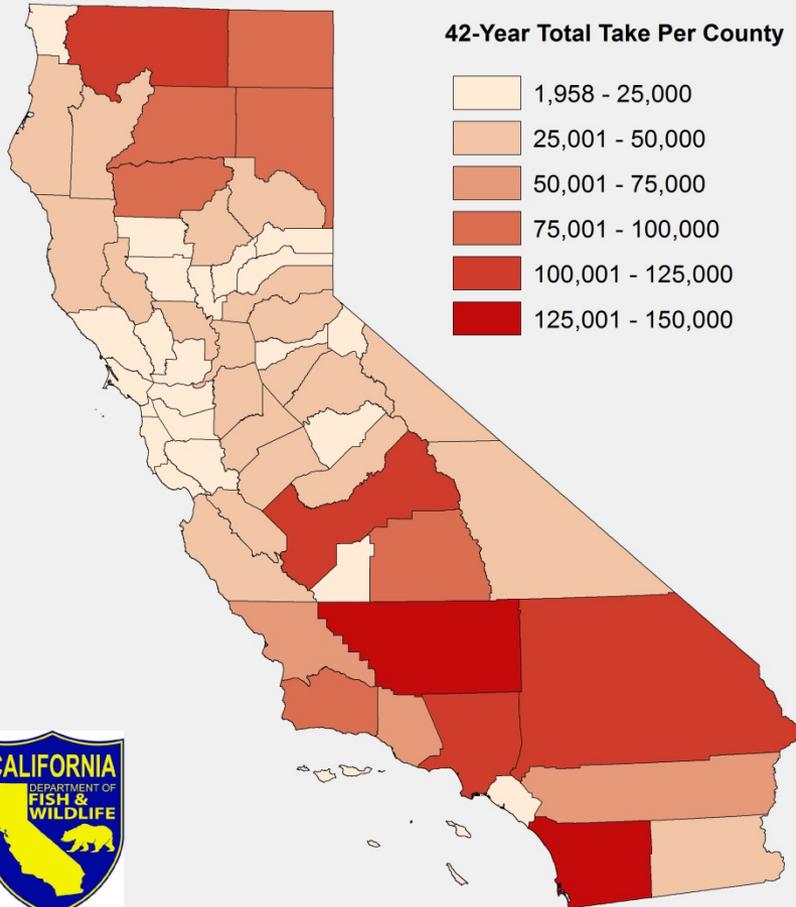
Presented by California Department of Fish and Wildlife Staff to the
California Fish and Game Commission Wildlife Resources Committee
January 14, 2015

CDFW Products being developed to manage California's Predators – **The Coyote**

- Report “Historical Distribution of Coyotes in North America and California Specifically”
- Occupancy Models
- Spatial Habitat Models
- Bibliography

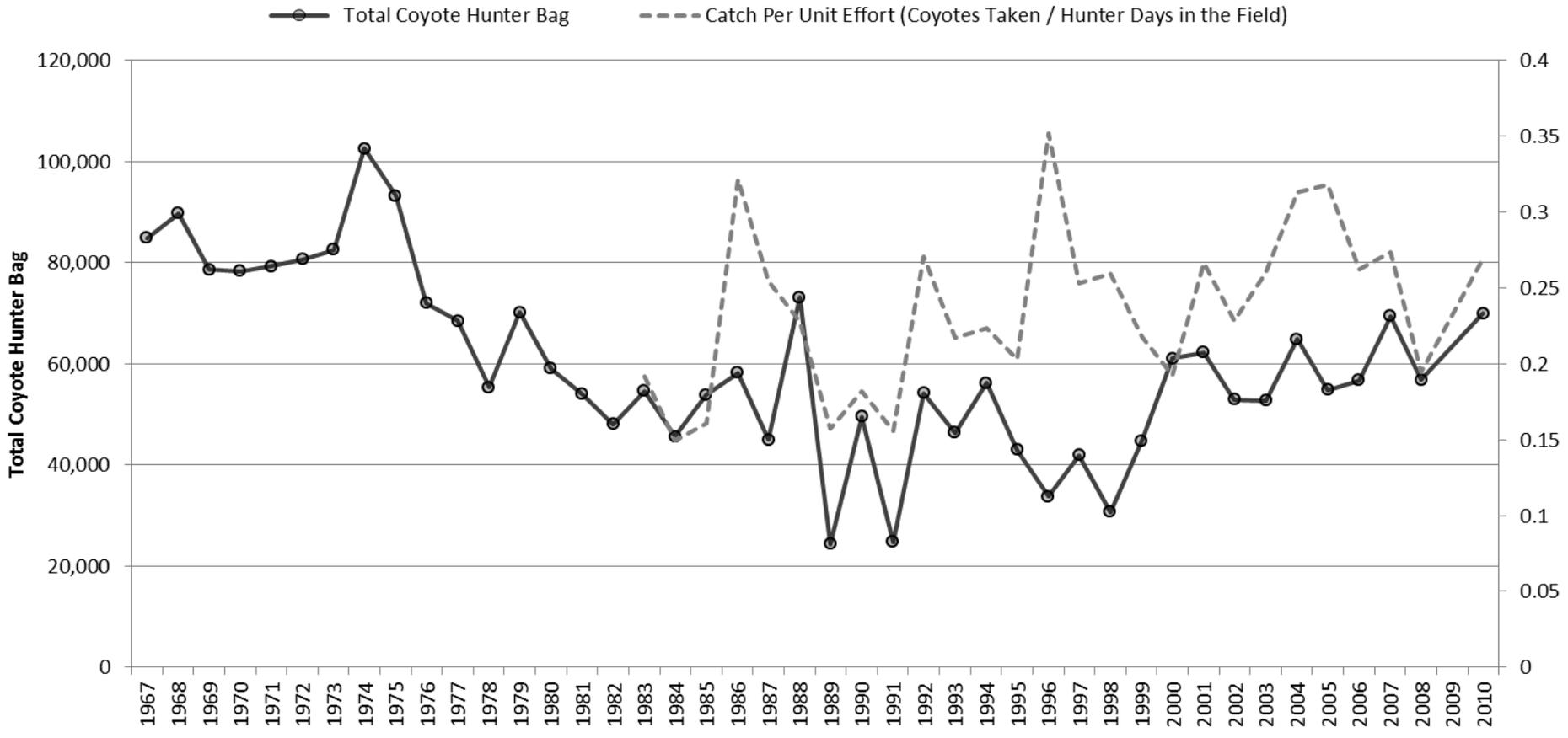


Number of Coyote Taken By County as Reported
in the CDFW Game Take Hunter Survey
for the Years 1967-2008 and 2010



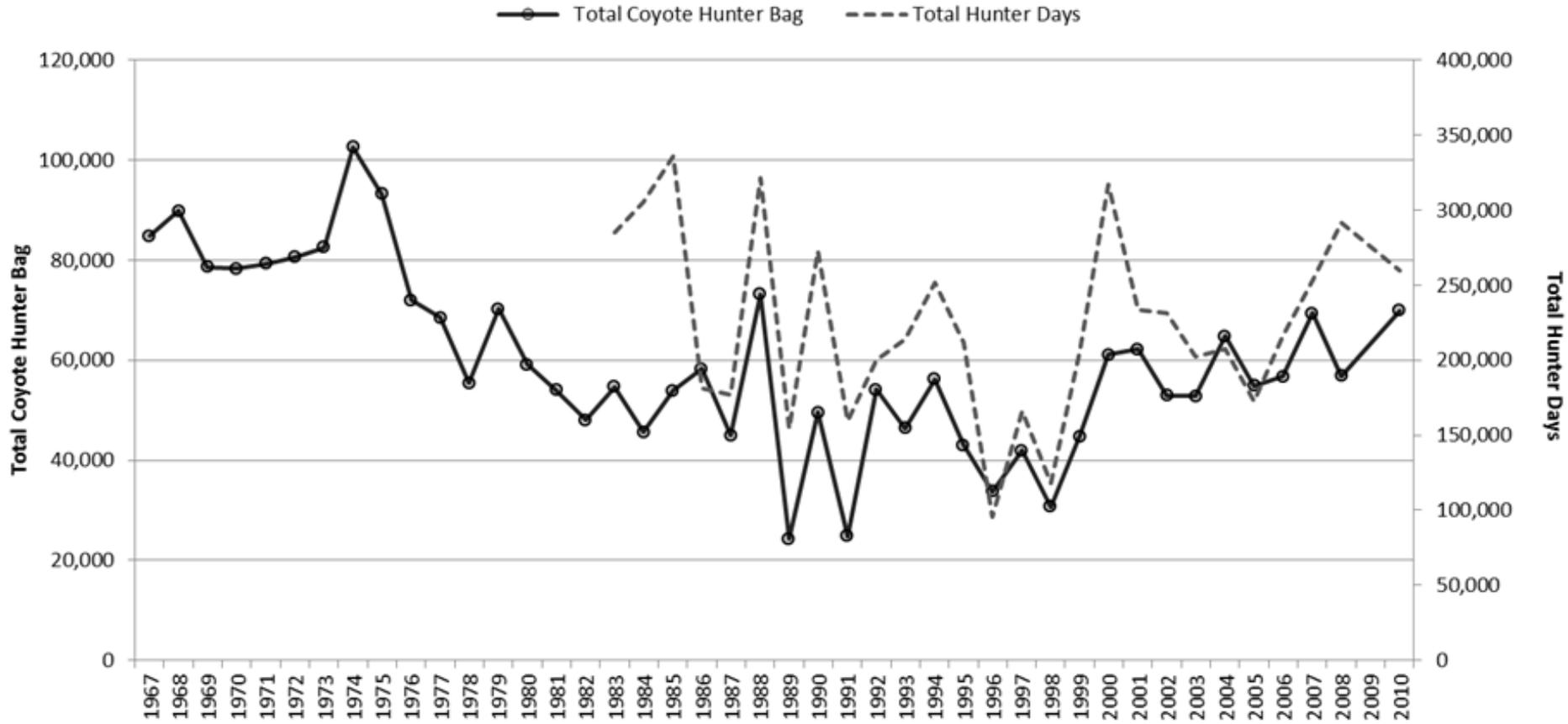
- Coyotes occur throughout California.
- The Game Take Hunter Survey (GTHS) has recorded hunter take of coyotes since 1967.
- The GTHS has documented “hunter effort” to take coyotes since 1983.

Total Coyote Harvest: Game Take Hunter Survey 1967-2010



- The reported overall take of coyotes by licensed hunters and catch-per-unit-effort for coyotes taken has remained relatively constant since record keeping began.

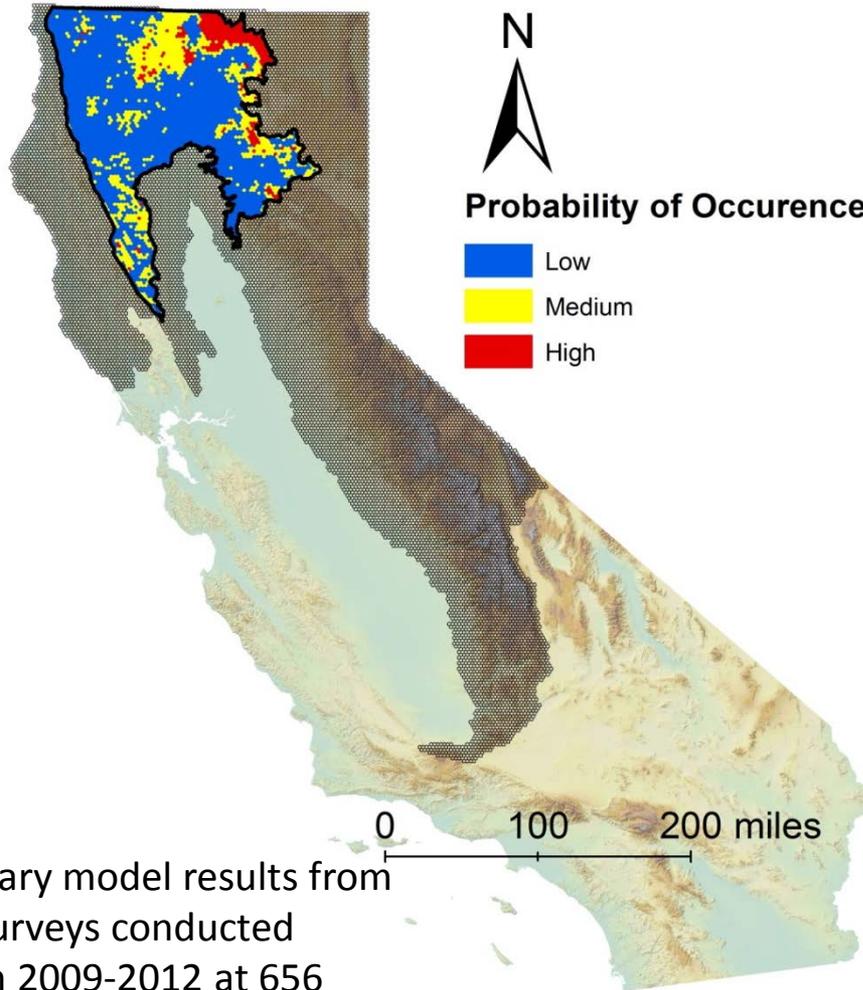
Total Coyote Harvest: Game Take Hunter Survey 1967-2010



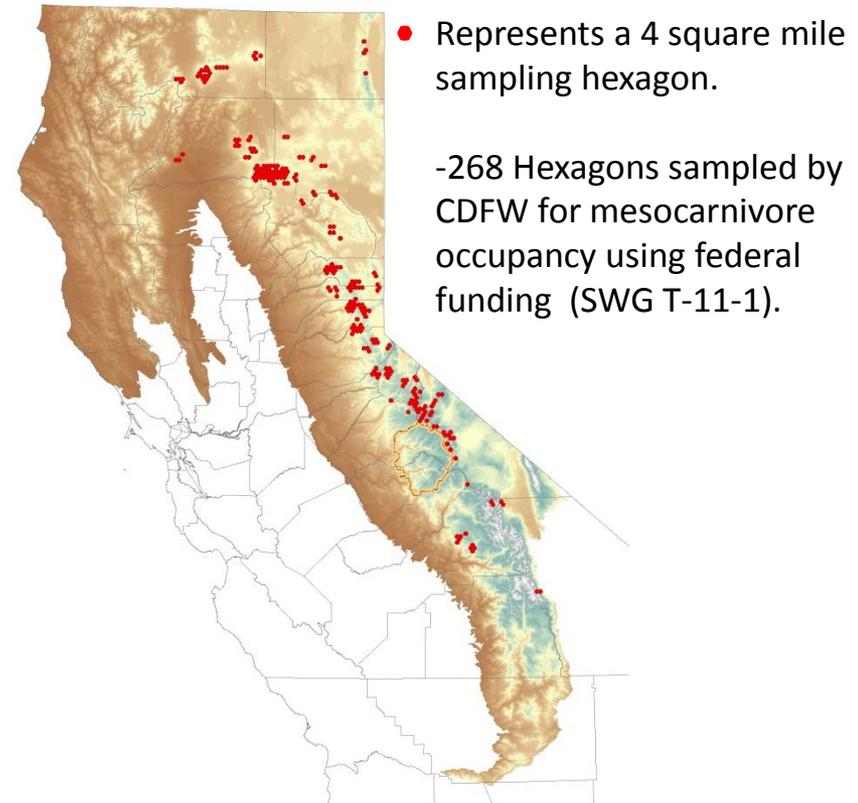
- The reported overall take of coyotes by licensed hunters and total hunter days has remained relatively constant since record keeping began.

Using Occupancy Modeling to Map how Coyote Abundance Varies Throughout California Forests

- Combine data from camera trap surveys
- Use occupancy as a surrogate for abundance at large spatial scales



Preliminary model results from CDFW surveys conducted between 2009-2012 at 656 randomly-located sites on public and private forestlands



Compiling systematic survey data from various sources for additional occupancy modelling

Using Predictive Habitat Modeling to determine potential Coyote Habitat in the State – Preliminary Results

- Compiling additional coyote presence data to improve the model's predictive performance. Current model using 166 coyote locations.
- Model identifies habitat variables having predictive influence (e.g. elevation).
- Habitat variables include: elevation, tree canopy cover, and CWHR habitat type.
- Maximum Entropy Habitat Model.

