# Developing a Partnership to Conserve American Kestrels: The Perspective from the Bird Banding Laboratory

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#### **USGS Bird Banding Laboratory**

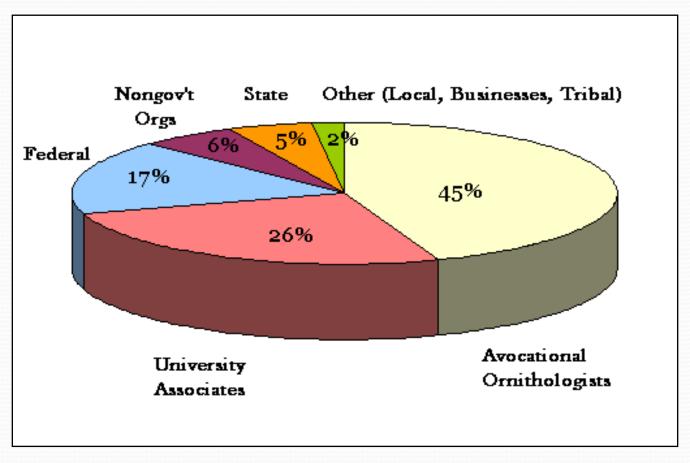
- BBL created in 1920
- Partnership with Canadian Bird Banding Office
- Responsibilities:
  - Issue permits for banding and/or marking birds in US
  - Manages banding and band encounter data from US and Canada
  - Provides metal bands for use in US and Canada





#### **Affiliations of Bird Banders**

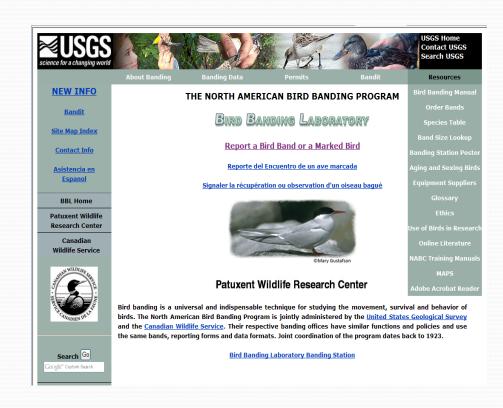
US Master permits: 1570 US sub-permits: 5800+





## **USGS Bird Banding Laboratory**

- Banding data records:
  - Apr. 70 million since1960
  - 1+ million new annually
- Band encounter records:
  - Apr. 5 million (all records)
  - 90,000 new annually
- Accepting recapture records





#### How banded birds are encountered



Live sightings of birds



Hunted 76



Found dead or injured

**Other** 

Recaptured in banding operations



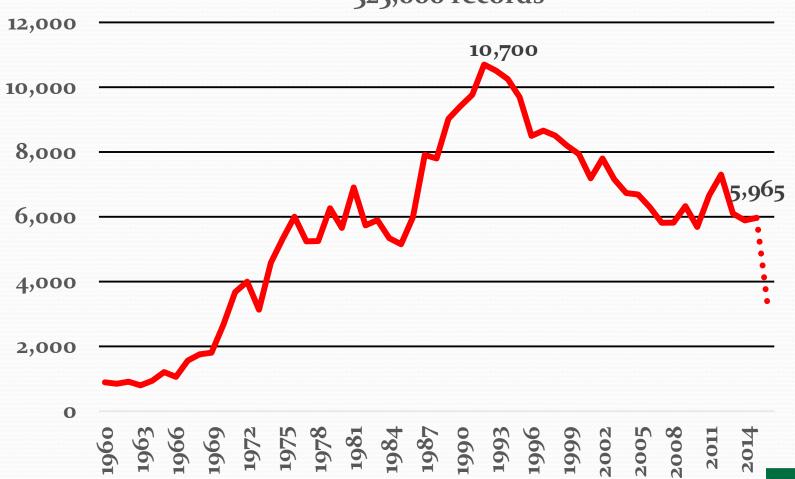
## **USGS Bird Banding Laboratory**

- Reduced Resources:
  - Staff reduced by 33%
  - Budget decreases
- Size of program remains stable
- Must support ongoing banding efforts
  - Management of migratory game birds
  - MAPS, owlnet
- Support new initiatives
  - American Kestrels

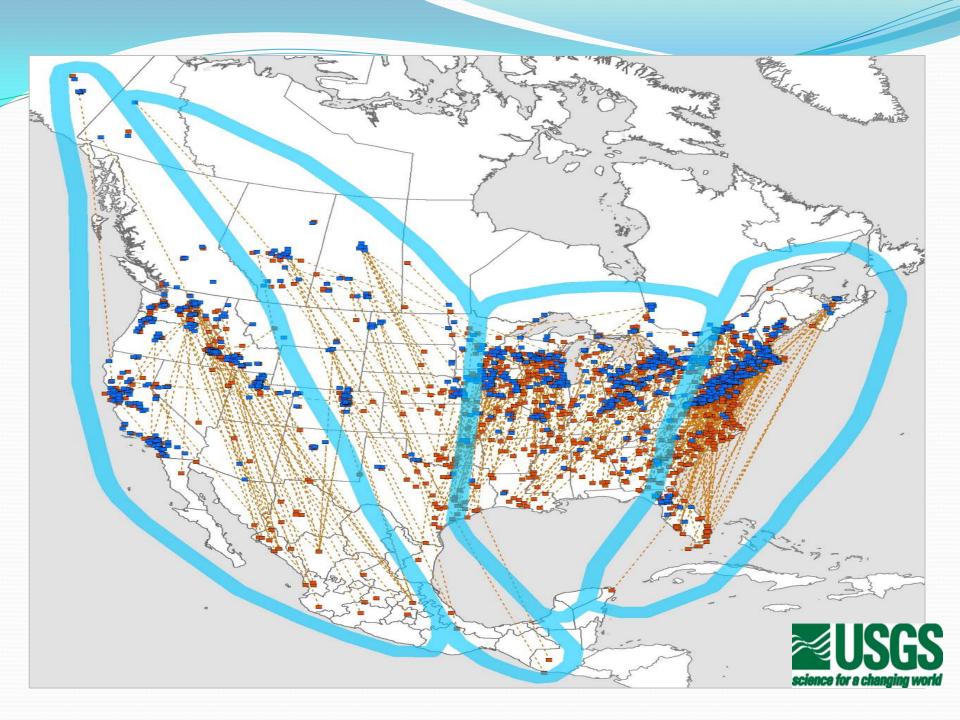










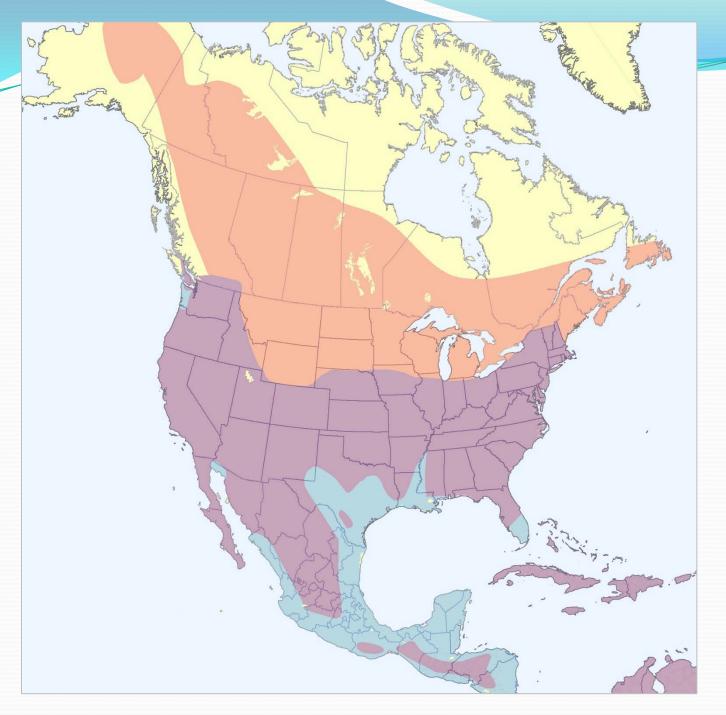


#### **BBL DATA**

- Emphasis shift from tracking movements to demographic studies
  - Other technologies are more efficient at defining movements
- Study design is important consideration for demographic studies
  - Resighting protocols
  - Geographic scale of results







American Kestrel range map



#### The American Kestrel Partnership

- Use existing BBL data resources
  - Explore and analyze existing band and band encounter records
    - BBL welcomes collaboration to produce analyses
  - Identify strengths, weaknesses
  - Recommend improvements
  - Enlist existing banders into program
    - BBL needs to determine who is truly cooperating in this program





## The American Kestrel Partnership

- Banding/marking should fit into a science-based conservation strategy
  - Should address factors responsible for declines
    - Resident vs. migratory populations
  - Should define the scientific priorities for future activities
  - Support required from the BBL and other programs should be identified
  - Should establish a clear linkage with conservation and/or management objectives





#### **American Kestrel Partnership**



- Develop Full Annual Cycle Models for kestrel populations
  - Resident vs. migratory populations
  - Need to produce estimates of demographic metrics
    - Nest productivity, seasonal survival estimates for adults and young
- Integrated Population Models
  - Integrating demographic data, survey data (BBS, migration, winter), and habitat data to inform conservation and management decisions

