A close-up photograph of a yellow-crowned night heron chick. The chick has bright yellow feathers on its head and neck, and darker, greyish-blue feathers on its body. A fishing hook is embedded in the chick's eye, which is wide open and looking towards the camera. The background is a blurred blue surface, likely water. The text of the presentation is overlaid on the right side of the image.

Seabirds and Recreational Fishing Gear in the Monterey Bay and Gulf of the Farallons Marine Sanctuaries

Rebecca S. Duerr DVM MPVM PhD



INTERNATIONAL
BIRD**RESCUE**

International Bird Rescue

Founded in 1971:

- Oregon and Arizona Standard tankers collision, Golden Gate
- >20,000 birds estimated killed
- >7,000 collected alive
- 40,000+ people trying to help birds
- Only ~300 birds released
- Since then, rehabilitation and oil spill response fields have blossomed

Ocean
Beach, SF





220+ OIL SPILL RESPONSES SINCE 1971



An aerial photograph of a vast, calm body of water, likely a lake or a wide river, with a light blue-green hue. The water's surface is covered in fine, concentric ripples. In the center of the image, there is a solid purple rectangular box containing white text.

**BUT 48 YEARS LATER, IBR IS NOT
JUST ALL ABOUT OIL SPILLS...**

HABs

Baby season

Adverse weather

Unusual contaminants

...OUR WORK LARGELY INVOLVES A NEARLY CONTINUOUS STRING OF MASS STRANDING EVENTS

Ocean food supply

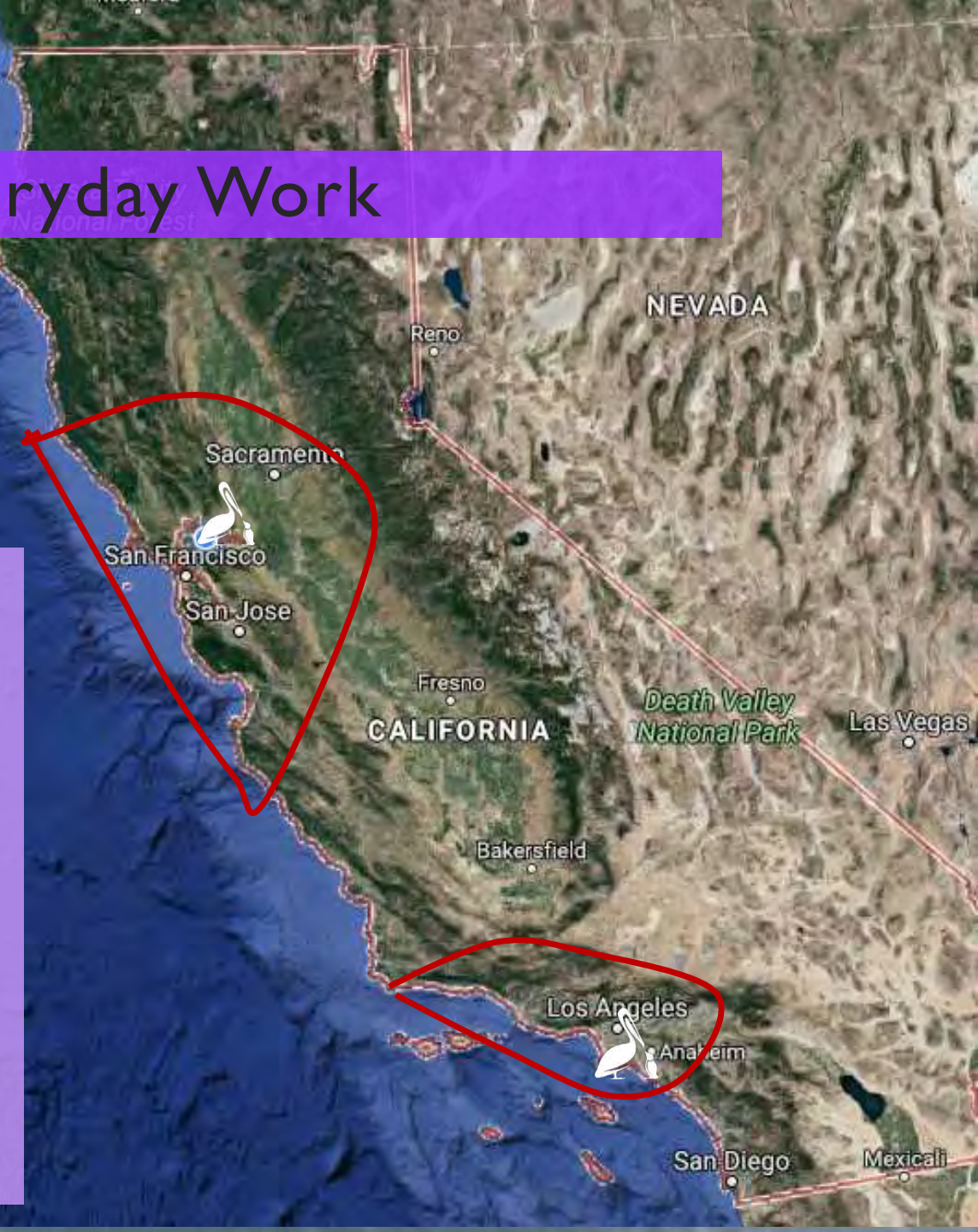
Misc wildlife calamities

Oil spills

Diseases

Everyday Work

- Two year-round wildlife centers
 - Manage 2 OWCN primary care centers
 - Referral hospitals for aquatic birds, ~4000 non-oiled birds/yr
 - 15 FT + 6 PT staff + VOLUNTEERS
- Turnkey oil spill facility in Anchorage AK
- Research
 - Treatment improvements
 - Causes of strandings
 - Pathology, disease
 - Post release monitoring



Post-Release Monitoring

- IBR federally banded all released birds
 - Began banding in 1979
- Banding data allows for follow-up
 - Metal federal band
 - Hard to read unless in-hand
 - Mostly dead reports
 - Plastic easy-read bands
 - Blue: Brown Pelicans
 - Red: Snowy Egrets
 - Black/white: Black-crowned Night Herons



**Sonoma County Wildlife
Rescue or Santa Rosa Bird
Rescue**

**IBR = Specialty
Hospital for
Aquatic Birds**

WildCare

Peninsula Humane Society

Native Animal Rescue

**Transferring
centers of
the NMSs**

SPCA for Monterey County



MUCH OF WHAT THEY SEND US ARE FISHING HOOK/LINE INJURED BIRDS

Major species affected

Western Gull
Brown Pelican
Common Murre
Brandt's Cormorant
California Gull
Surf Scoter
Western Grebe

Example: Mont SPCA FHL cases
33% transferred
45% die/euth
22% released (mostly WEGUs)

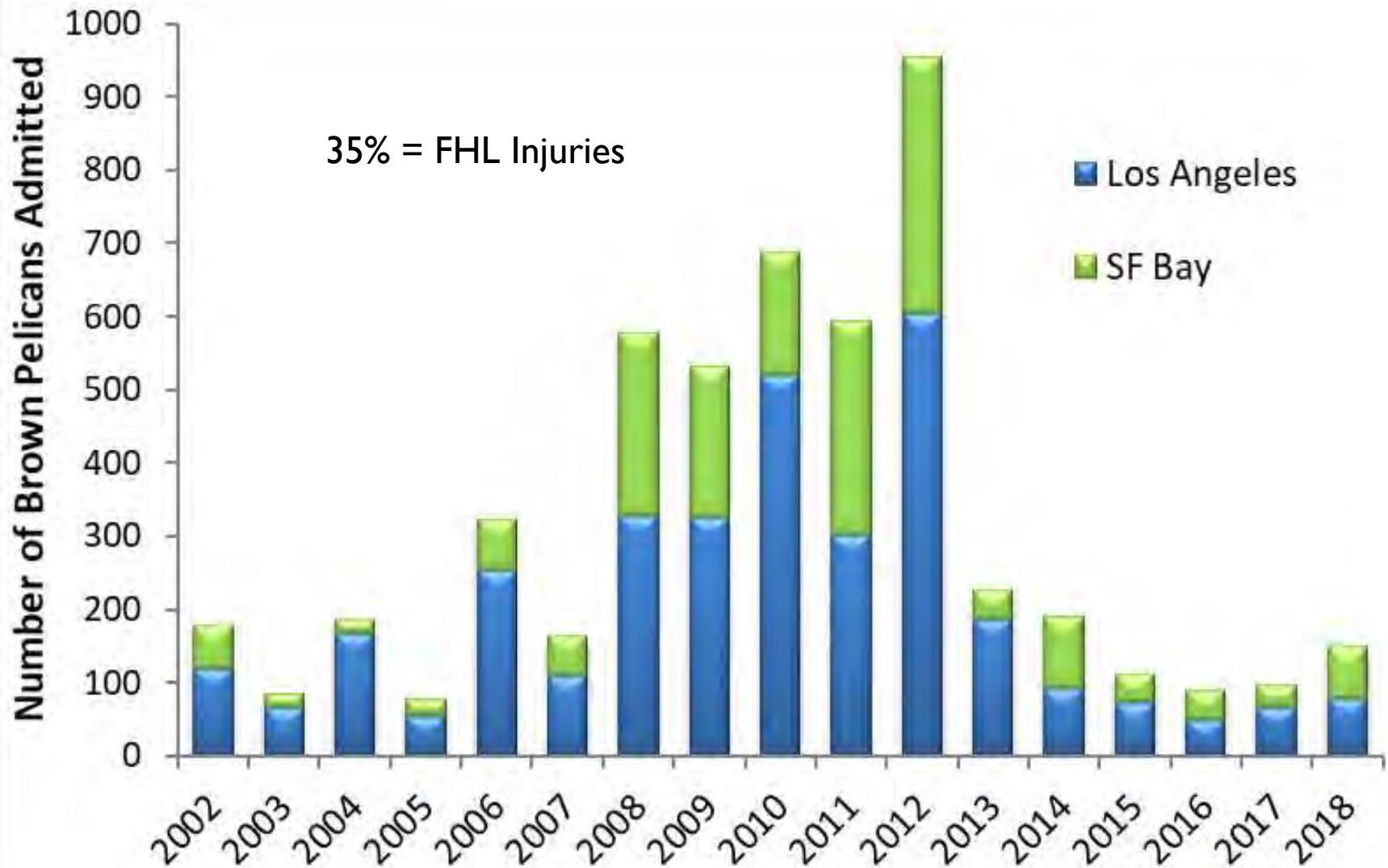
Minor species affected

American White Pelican
Ashy Storm-Petrel
Black-crowned Night-heron
Canada Goose
Common Loon
Common Merganser
Double-crested Cormorant
Elegant Tern
Glaucous-winged Gull
Heermann's Gull
Horned Grebe
Mew Gull
Northern Fulmar
Pacific Loon
Pelagic Cormorant
Pigeon Guillemot
Red-throated Loon
Snowy Egret
Willet

Only live birds are
transferred

WE TREAT A LOT OF PELICANS...

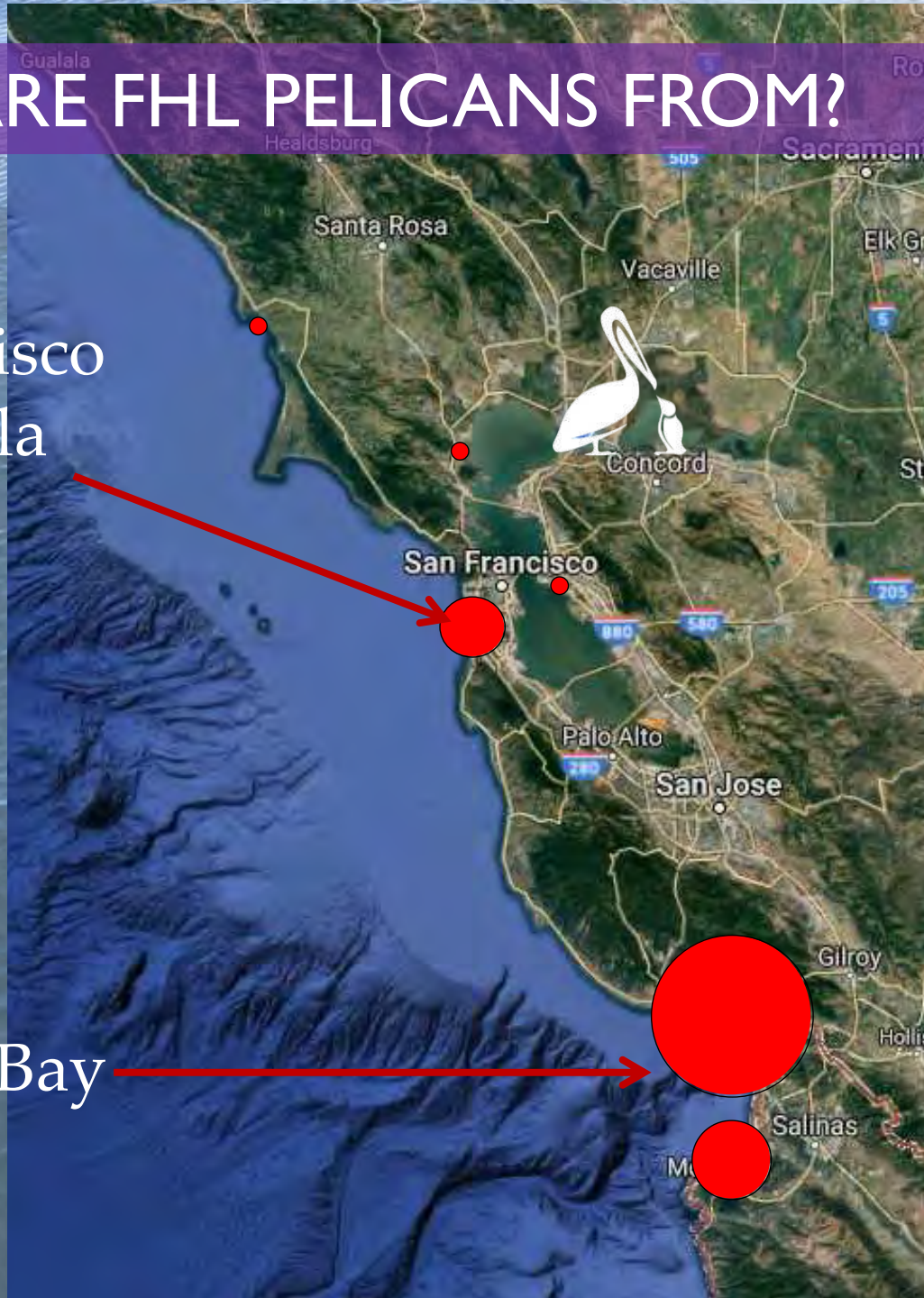
2002-2018 = 5028 CA Brown Pelicans



WHERE ARE FHL PELICANS FROM?

San Francisco
Peninsula
(59)

Monterey Bay
(356)

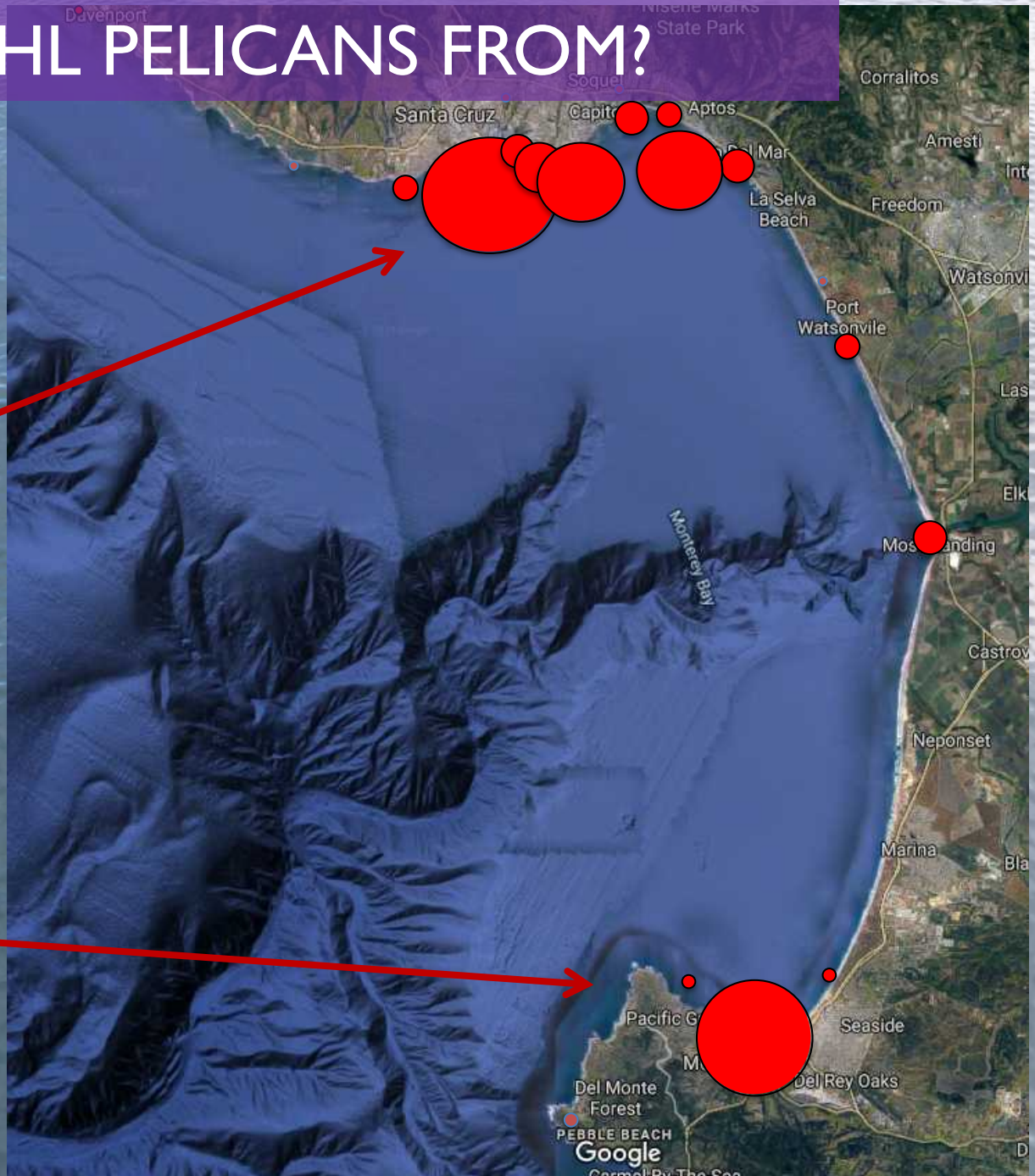


WHERE ARE FHL PELICANS FROM?

MONTEREY
BAY

Santa Cruz
(248)

Monterey
(108)



WHERE ARE FHL PELICANS FROM?

Associated with public fishing piers?



Probably yes



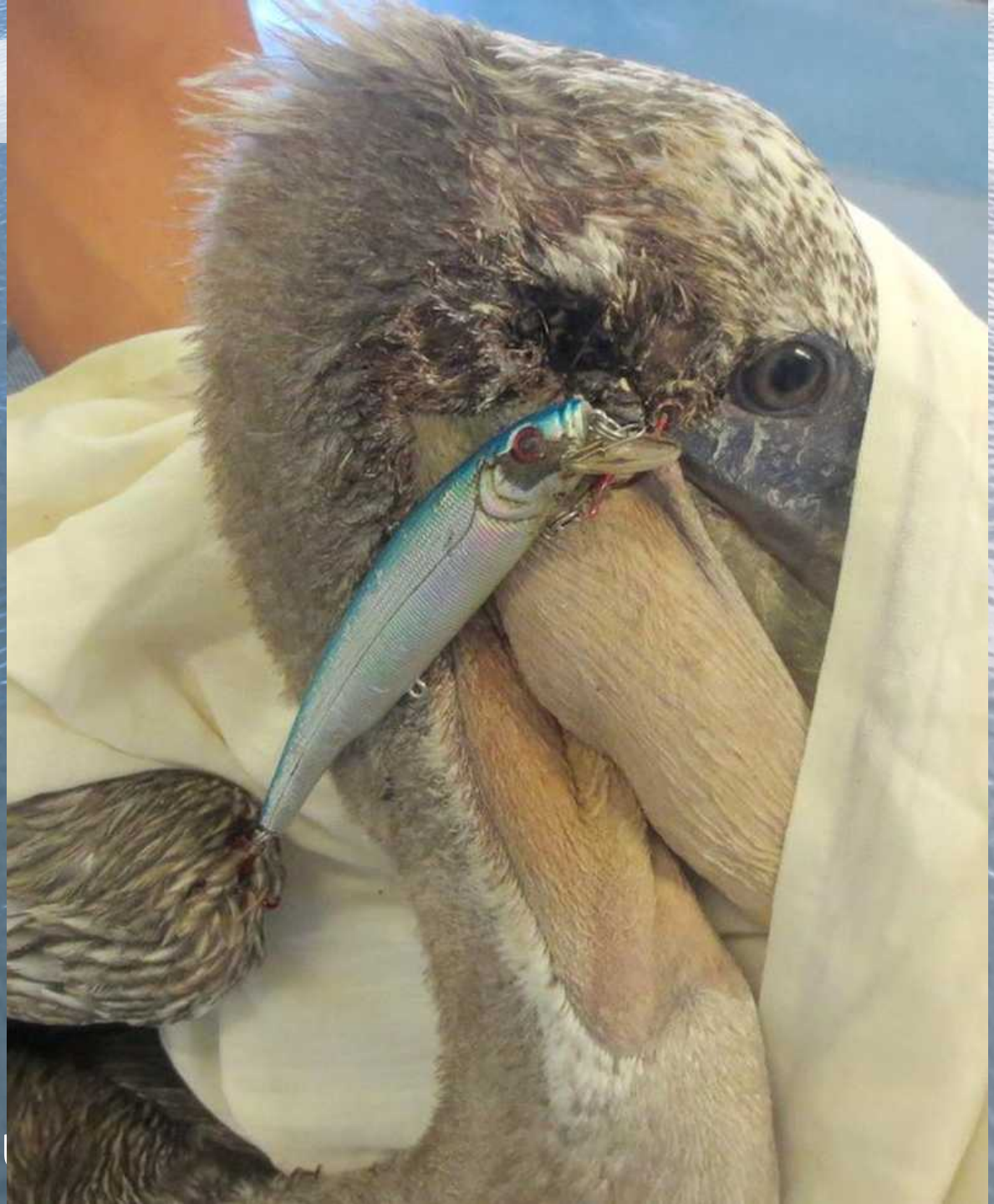
COMMON CULPRITS RECREATIONAL GEAR



DR. RESCUE

Damage Done

Faux fish with multiple treble hooks cause the worst damage



Punct

Damage Done by Recreational Gear

A close-up photograph of a bird's head, likely a seabird, showing a severe injury on its forehead. A metal hook is embedded in the bone, creating a deep, jagged laceration. The surrounding skin is dark and appears to be in pain or infection. The bird's eye is visible above the wound.

Hooks stabbing bone → Infections

Damage Done by Recreational Gear



Pelican from Moss Landing

Fish hooks
Stabbing tendons



Tissue
Death



Dysfunctional
Limbs



Euthanasia

Damage Done by Recreational Gear



Fish hooks
ruin joints



Entanglement immobility
causes pressure sores



Damaged bones and
tendons

Damage Done by Recreational Gear



Fish hooks
rip tissue

Damage Done by Recreational Gear



Monofilament
cuts like a knife

Damage Done by Recreational Gear



Multiple
injuries



Monofilament

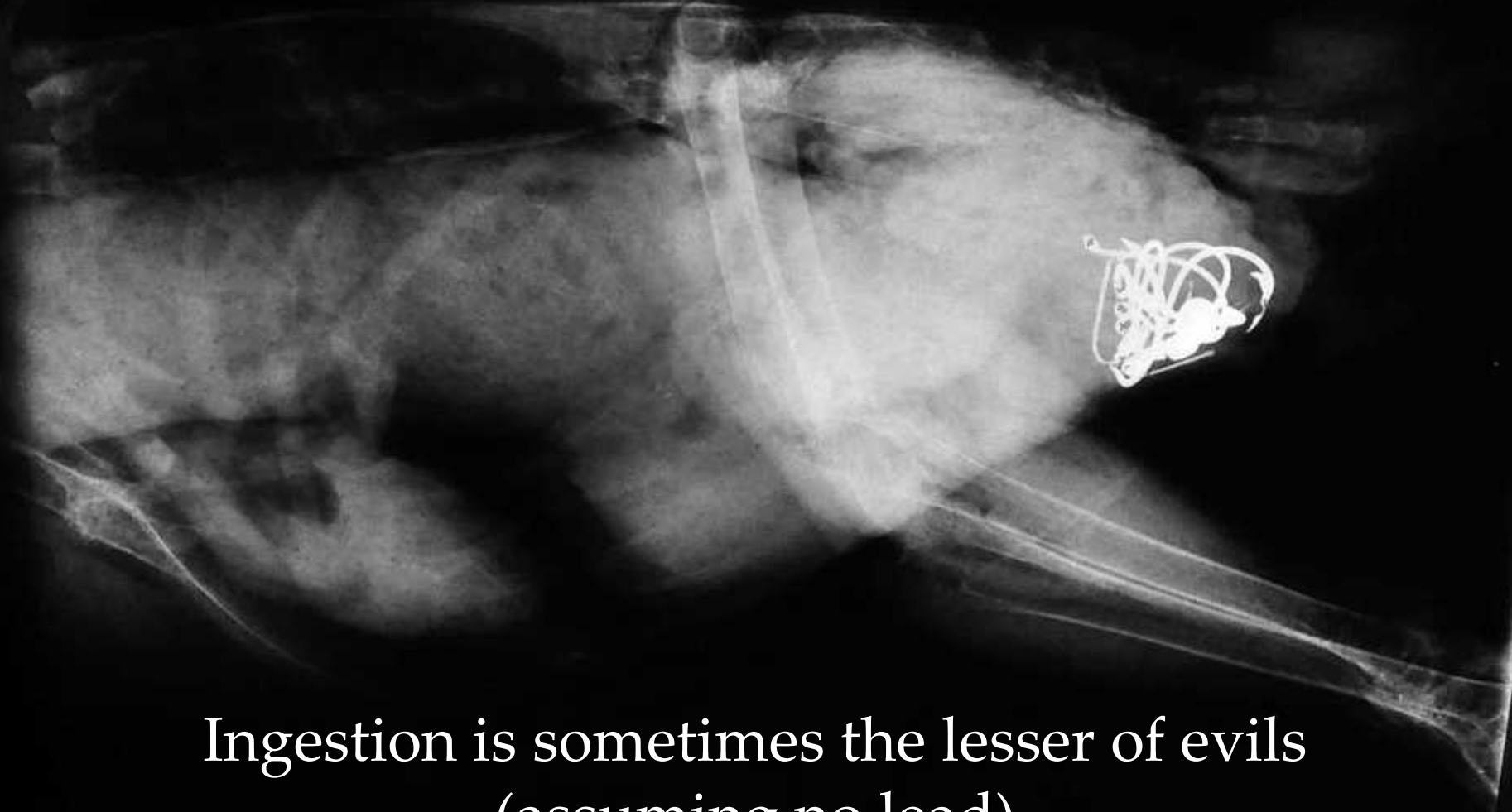


Limb strangulation



Damage Done by Recreational Gear

J/12/0d
60-00 3F05
R66E



Ingestion is sometimes the lesser of evils
(assuming no lead)

Damage Done by Recreational Gear



New pelican Aug 14

- Rescued at Pescadero
- Hooks through leg and foot....I'll meet him Friday

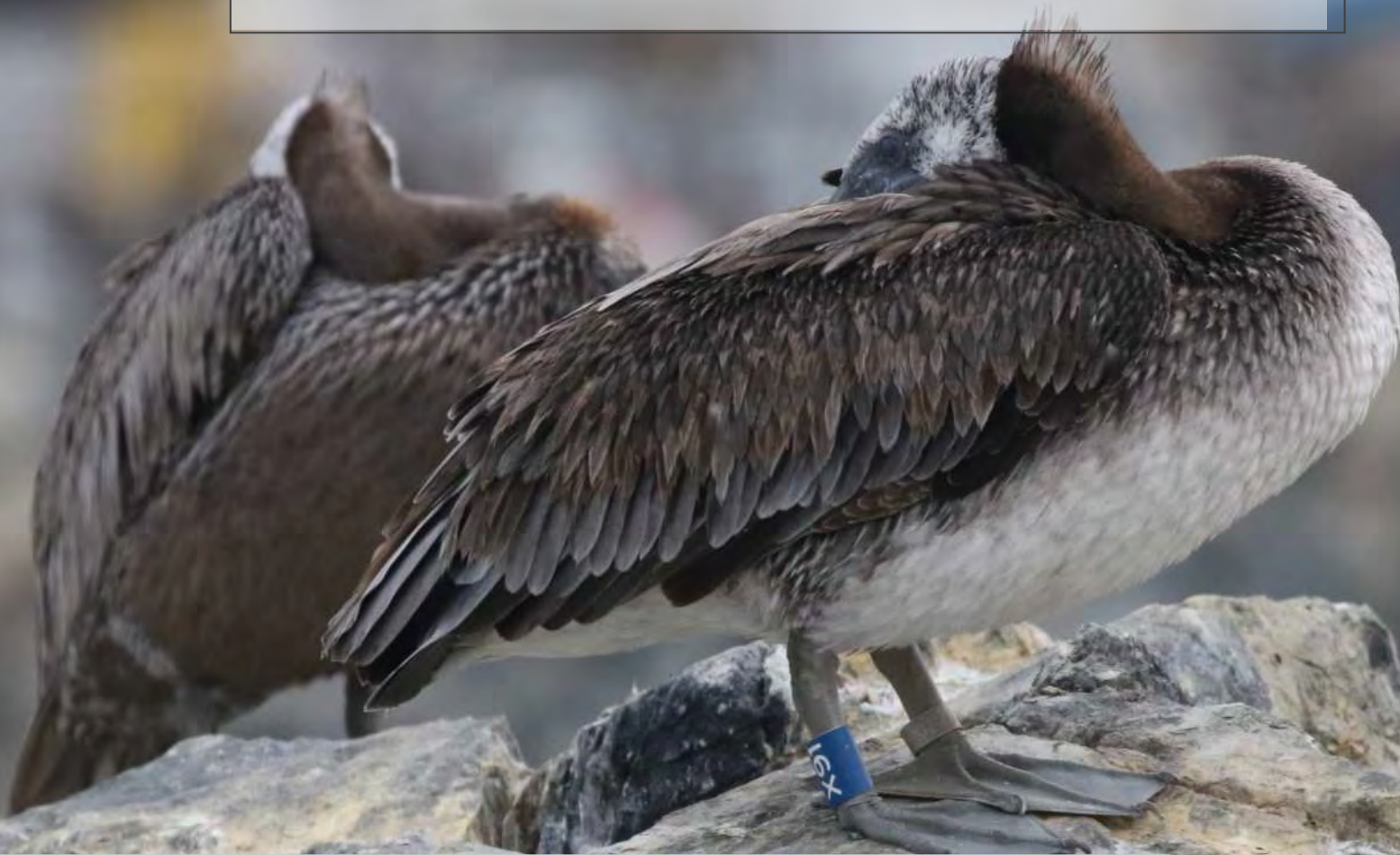
PELICANS ARE EXPENSIVE PATIENTS

Expenses:

- Fish + vit supplements
- Medications
- Staff time
- Veterinarian time
- X-rays, anesthesia etc.
- Bandaging materials
- Caging, utilities etc.
- Transport costs

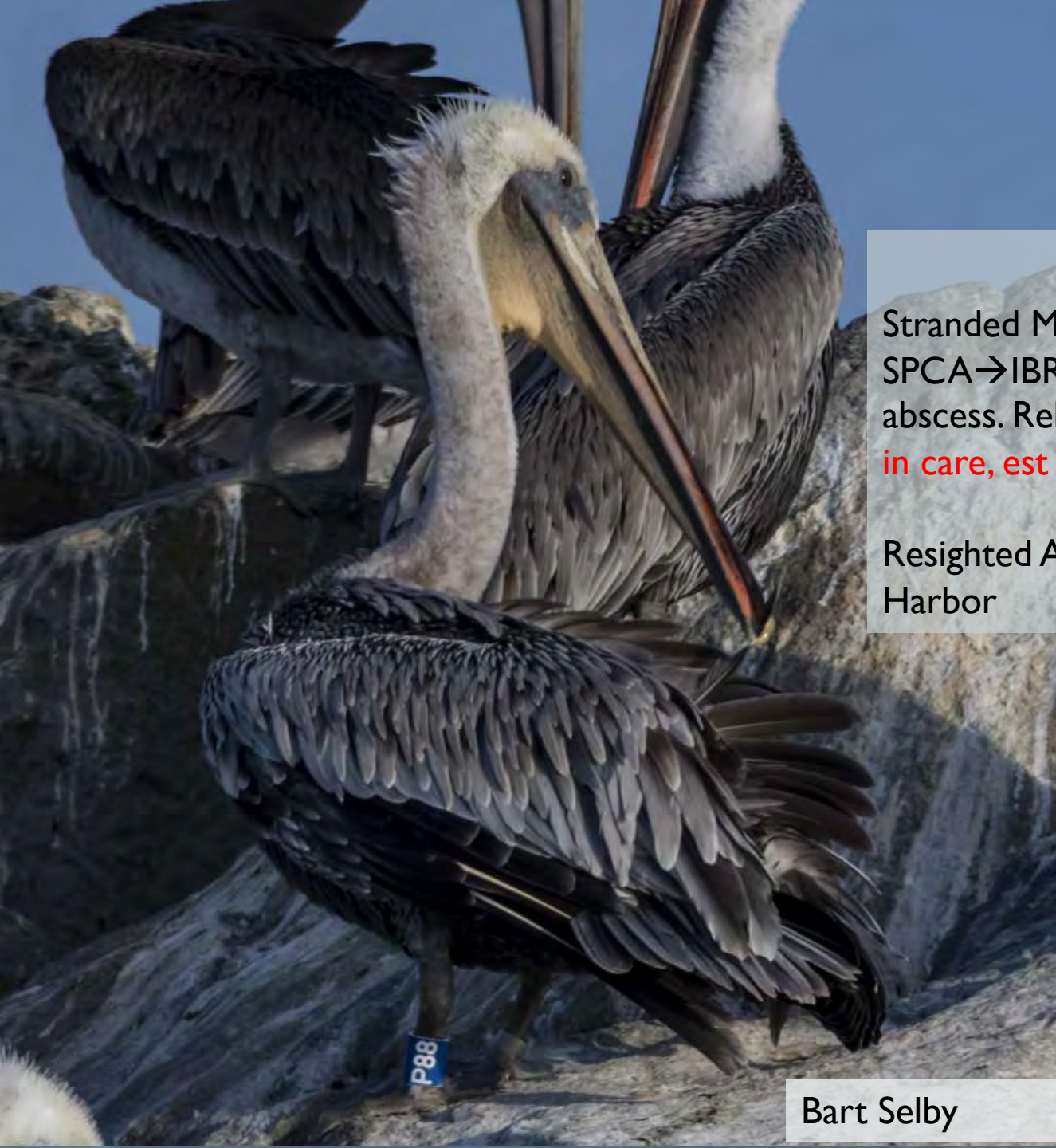


BUT OFTEN HAVE A GOOD PROGNOSIS
WITH TREATMENT: X91



Stranded Moss Landing Feb 4, 2019: Mont SPCA → IBR. Constriction injuries both wings, both legs, hook wound at right wrist. Released Apr 25, 2019. **71 days in care, est cost to IBR = \$2556**
Resighted Aug 10, 2019, Pillar Point Harbor

Steve Hampton



P88

Stranded Monterey Dec 12, 2014: Mont SPCA → IBR. Wrist, hock wounds, chest abscess. Released Feb 26, 2015. **72 days in care, est cost to IBR = \$2592**

Resighted Aug 13, 2019, Pillar Point Harbor

Bart Selby

Pier fishing may be 'free' to fishers....
but NOT TO US
Or to the birds: pain, suffering, disability, death

Costs of treating fishing gear injured birds

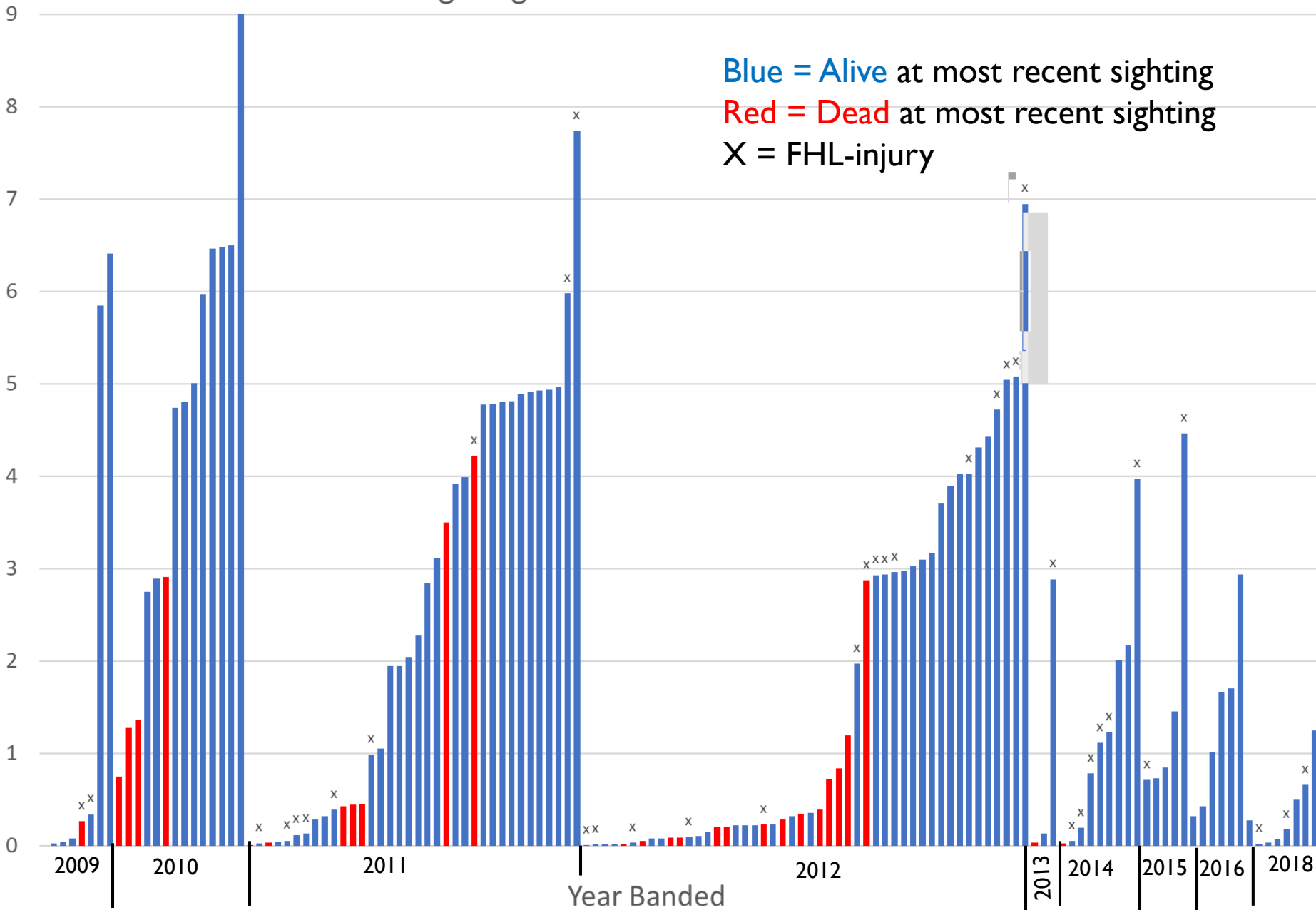
	n	Birds days in care	low est	high est
2017	73	1345	\$21,520.00	\$48,420.00
2018	86	2215	\$35,440.00	\$79,740.00

Plus 19,709 volunteer hours/year
(SF Bay center only)

Post-Rehab Sightings of Blue-banded Pelicans from NMSs

Blue = Alive at most recent sighting
Red = Dead at most recent sighting
X = FHL-injury

Years from Release to Re-sighting





Thank You for Listening!

How do we solve this
problem?

rebecca.duerr@bird-rescue.org

