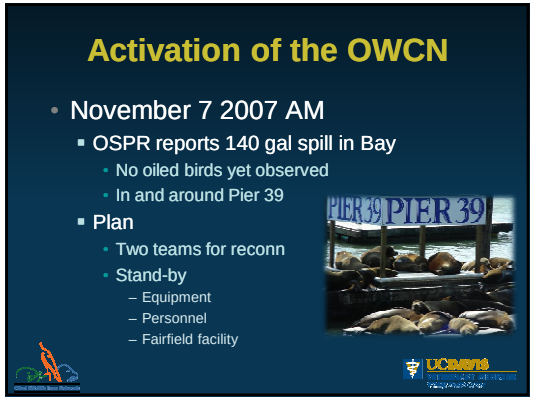
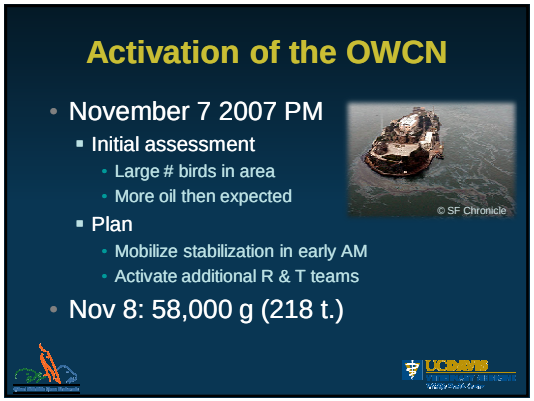
Wildlife Operations During the Cosco Busan Spill:
A Political Disaster in a Sea of Discontent
M. Ziccardi, J.G. Massey & Y. Addassi

November 7, 2007 0830 hr


Activation of the OWCN
November 7 2007 AM
OSPR reports 140 gal spill in Bay
No oiled birds yet observed
In and around Pier 39
Plan
Two teams for reconn
Stand-by
Equipment
Personnel
Fairfield facility
PIER 39

HUNDREDS OF THOUSANDS OF MIGRATING BIRDS THREATENED
About 1.6 million shorebirds and waterfowl, hundreds of species, come to San Francisco Bay each year, most staying for the winter, some stopping on their way south. Wildlife experts fear that the oil washing onto sandy beaches and wetlands threatens the birds' survival.
Shoreline where oil hit
Light to heavy oil deposits
EAST BAY SHOREBIRDS
American avocets, long-billed curlews, black-bellied plovers, least and Western sandpipers and dunlins head for the mudflats and tidal marshes, where they probe for worms and little clams.
Coast Guard report
As of Wednesday evening:
804 live oiled birds recovered
244 of those were washed
105 had died or were euthanized
590 birds were collected dead
FARALLON ISLANDS BIRDS
Common murres, Western gulls, Cassin's auklets and ashy petrels seek the rocky islands to breed and feed.
OCEAN WATERFOWL
Surf scoters, greater and lesser scaups, ruddy ducks and Western grebes spend most of the time in the water feeding on small fish and crustaceans.
SANDY COASTAL BEACH BIRDS
Sanderlings, marbled godwits, willets, whimbrels and snowy plovers run along feeding on insects and invertebrates in the kelp fine left by high tide.
Site of fuel oil spill
© SF Chronicle
Sources: U.S. Coast Guard


Activation of the OWCN
November 7 2007 PM
Initial assessment
Large # birds in area
More oil then expected
Plan
Mobilize stabilization in early AM
Activate additional R & T teams
Nov 8: 58,000 g (218 t.)
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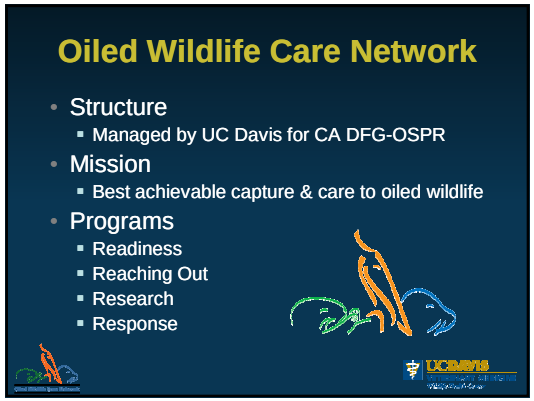
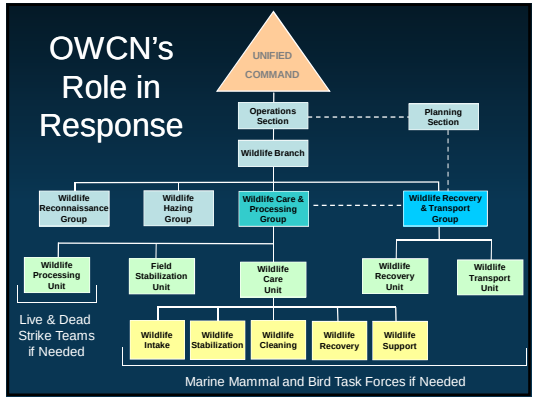

Oiled Wildlife Care Network
Structure
Managed by UC Davis for CA DFG-OSPR
Mission
Best achievable capture & care to oiled wildlife
Programs
Readiness
Reaching Out
Research
Response

North Coast Marine Mammal Center
Humboldt State University
Primary Care Facilities
Participating Organizations
California
Santa Rosa Bird Rescue Center
Wildcare
Pt. Reyes Bird Observatory
The Marine Mammal Center
Peninsula Humane Society
UC Davis Wildlife Health Center
San Francisco Bay Oiled Wildlife Care and Education Center (SBBC)
Lindsay Wildlife Museum
UC Santa Cruz
Marine Wildlife Veterinary Care Research Center (DFG-OSPR)
Native Animal Rescue
SPCA of Monterey County
Monterey Bay Aquarium
Pacific Ocean
Pacific Wildlife Care
UC Santa Barbara
Santa Barbara Wildlife Care Network
The California Wildlife Center
L.A. Oiled Bird Care and Education Center (BBRC)
The Marine Mammal Care Center at Fort MacArthur
Long Beach Aquarium of the Pacific
Wetlands and Wildlife Care Center
Friends of the Sea Lion
WildlifeAssist
Project Wildlife
SeaWorld of California


OWCN's Role in Response
UNIFIED COMMAND
Operations Section
Planning Section
Wildlife Branch
Wildlife Reconnaissance Group
Wildlife Hazing Group
Wildlife Care & Processing Group
Wildlife Recovery & Transport Group
Wildlife Processing Unit
Field Stabilization Unit
Wildlife Care Unit
Wildlife Recovery Unit
Wildlife Transport Unit
Live & Dead Strike Teams if Needed
Wildlife Intake
Wildlife Stabilization
Wildlife Cleaning
Wildlife Recovery
Wildlife Support
Marine Mammal and Bird Task Forces if Needed

Recovery & Transportation

Field Stabilization

SFBOWCEC Fully Activated

Processing

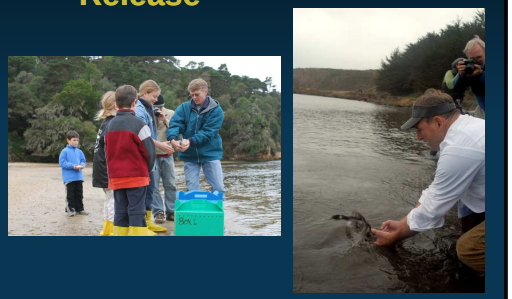
Intake

Pre-Wash Stabilization

Cleaning

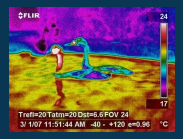
Pre-Release Conditioning

Release



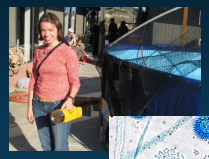
Research: Husbandry

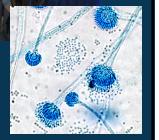
- Keel wraps & booties
- Gavage recipes
- Infrared thermography
- Soft side net-bottom pen



Research: Medical

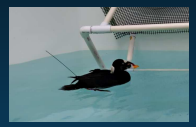
- Hemaglobin
- Lactate
- Sucralfate
- Colloid fluids
- Disease surveillance
  - Aspergillus in birds/envt
  - Fecal pathogens





Research: Post-Release

- Three groups
  - Oiled, rehabilitated (n=17)
  - Captured, rehabbed (n=16)
  - Captured, released (n=22)
- Method
  - Itracoelomic implant of VHF radiotransmitters
- Goals
  - Differences in survival
  - Changes in distribution
  - Changes in behaviors



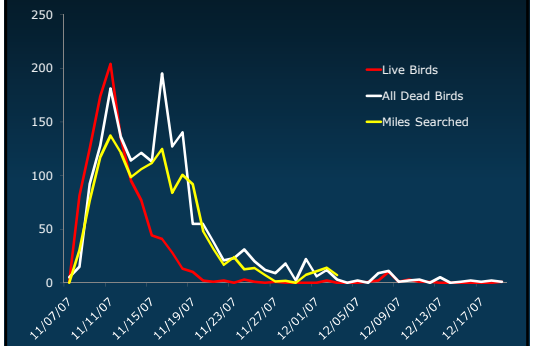
Meanwhile, in Santa Cruz…

- Nov 10: Large numbers of birds present in Monterey Bay
  - No apparent oil, but not waterproof
- Between Nov 10 & Jan 7
  - Live birds = 568 (371 released)
  - Dead birds = 82
  - Facilities activated = 3
- Caused by blue-green algae
- Little press interest

Animal Totals

Live		
	Bird	Mammal
Died/Euthanized	650	1
Released	418	0
Unknown Disposition	15	0
TOTAL	**1084**	**1**

Dead		
	Bird	Mammal
Oiled	965	6
Unoiled	883	0
Unknown	16	0
TOTAL	**1854**	**6**



Release Percentages (Species > 5 animals collected)

Species	Grand Total	Released	Release %
SUSC	375	136	41.9%
WEGR	151	51	34.4%
EAGR	139	44	32.4%
GRSC	94	53	56.4%
HOGR	58	21	36.2%
COMU	51	20	39.2%
RUDU	41	11	26.8%
COLO	24	2	8.3%
AMCO	22	17	77.3%
CLGR	12	5	41.7%
DCCO	11	1	9.1%
WWSC	11	4	36.4%
LESC	10	3	30.0%
BUFF	6	2	33.3%
WEGU	6	3	66.7%
BRAC	5	0	0.0%
NOFU	5	0	0.0%

Volunteer Response

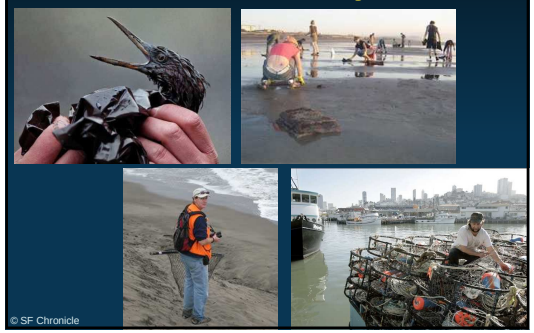
Staff: > 60

Volunteers

- 23 of 25 Member organizations
- 10 non-Member organizations
- 1,500 convergent volunteers registered
  - 500 utilized
- 450 pre-trained volunteers utilized
- > 13,000 volunteer hours

Non-Wildlife Issues

Public Outcry



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Political Outcry

Legislative Response

- 10 State & 2 Federal bills introduced
  - AB 1960 (Nava): Inland Prevention Pgm
  - AB 2031 (Hancock): OSPR to train/$ local spill response managers/volunteers
  - AB 2911 (Wolk): Inland Response Pgm; enhances OWCN for search & rescue
  - AB 2935 (Huffman): Expand planning for environmentally sensitive areas

Solutions

- Clear organizational responsibilities
- More trained field personnel
- Better stabilization coordination
- Increased public communication
- Electronic medical records system
- New technology
  - Soft-sided pens
  - Preventive wraps

What Impacts Survival?

- Product spilled
- Species affected
- Weather
- Animal condition
- Season
- Speed of capture
- Facility availability
- Trained personnel
- Pre-spill preparation

Acknowledgements

- OWCN: J. Bill, D. Ballard, S. Riggs & L. Hull
- OWCN Member org staff: Especially J. Holcomb & C. Clumpner
- OSPR: NorCal Field Staff & C. Murphy
- Hundreds of other staff and volunteers who worked so hard

Questions?

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