

# **A Qualitative Comparison of National and Regional Approaches to Multi-Stakeholder Oiled Wildlife Preparedness and Response**

**Contact: Paul Kelway - [PaulKelway@oilspillresponse.com](mailto:PaulKelway@oilspillresponse.com)**

Wildlife Preparedness and Response Manager

Oil Spill Response Limited, Lower William St, Southampton SO14 5QE, United Kingdom

## **INTRODUCTION**

The California Oiled Wildlife Care Network (OWCN) has served as an example of what is possible in Tier 2 oiled wildlife preparedness and response through the application of academic rigor, programmatic funding and multi-stakeholder partnering (Newman et al., 2003). As the importance of pro-active wildlife response preparedness has become more widely recognised internationally (Kelway et al. 2014), many countries and stakeholders have looked to California as an example and inspiration for other national and regional approaches to preparing for and responding to oiled wildlife incidents. Through a series of interviews with stakeholders in California as well with stakeholders involved in other national and regional preparedness initiatives in Brazil, New Zealand, Japan, The Netherlands and the European Union, this paper will reflect on key developments and lessons-learned from the California system and how it has influenced and compares to other national and regional approaches. Finally, this paper will highlight insights from these initiatives that may be of relevance to ongoing international efforts by stakeholders to integrate wildlife response preparedness into government and industry preparedness systems in line with accepted good practice (IPIECA, 2014).

## **METHODS**

A series of semi-structured interviews were conducted based on a pre-defined interview guide. Interviews were undertaken with California based stakeholders of the Oiled Wildlife Care Network, including from the Karen C. Drayer Wildlife Health Centre at the University of California, Davis (from where the OWCN program is managed), the California Department of Fish and Wildlife's Office of Spill Prevention and Response (OSPR), and member organisations International Bird Rescue and the Marine Mammal Center. Interviews were then conducted with a key stakeholder from each of five other countries or regions that have experienced oiled wildlife incidents and where some preparedness developments have occurred. This included Wildbase at Massey University in New Zealand, Aiuká in Brazil, NRDA Asia in Japan, SON Respons in The Netherlands and the Sea Alarm Foundation regarding Europe-wide preparedness efforts.

## **RESULTS AND DISCUSSION**

### **Lessons learned from the California System**

The history of oiled wildlife response in California and the development of the OWCN in the 1990s has been well documented (Newman et al., 2003). According to the University of California, Davis (UC Davis) the founding vision of the OWCN was "to make California the most proactive region in the world for oiled wildlife response" (The Regents of the University of California, Davis campus). Today the OWCN has over 40 member organisations and more than 1300 trained responders and has responded to over 75 marine and inland oil spill incidents.

Notable changes to wildlife preparedness and response since the OWCN was instituted include a mandate for and greater focus on field operations including reconnaissance, hazing and deterrence, and field stabilisation. Providing immediate care to oiled animals through field stabilisation has

increased animal survival. Other changes include the incorporation of technology into response such as the development and use of a Wildlife Recovery iOS application and an Oiled Wildlife Rehabilitation Medical Database (OWRMD) (Clumpner et al., 2018). The OWCN's training program has also been expanded and standardised. Finally, increased OWCN staffing at UC Davis has meant that there are now more full-time staff managing key areas of readiness and response.

OWCN stakeholders were asked to name what they saw as the key strengths of the approach to wildlife response preparedness in California. Several key themes emerged including 1) a science-based approach 2) the spirit of collaboration and diversity of network members 3) having a coordination body (UC Davis) to interface with government, network members and other stakeholders and 4) the legislative mandate that created OSPR and the OWCN and which, in turn, has provided sustained funding and enabled formal integration with oil spill response structures in California.

### **Global perspectives on preparedness efforts and future challenges**

While not an exhaustive list of countries where efforts to advance wildlife response preparedness have been catalysed, interviews were undertaken with stakeholders from New Zealand, Brazil, Japan and Europe (regarding developments in The Netherlands and in Europe as a whole). For each country, key milestones were explored as well as trigger points for preparedness efforts, strengths and challenges of the response systems, and any similarities with or influences from the California system.

Across all interviewees common themes emerged globally regarding barriers to effective response and future challenges. These included 1) sustained funding 2) political challenges and competing priorities 3) changing frequency of and types of incidents and 4) a loss of expertise through generation change.

### **CONCLUSION**

The OWCN and some of its founding member organisations such as International Bird Rescue have played an important role in the development of the field of oiled wildlife response. The OWCN has successfully demonstrated what is possible with funding, a legislative mandate, multi-stakeholder collaboration and a commitment to excellence. However, without any one of these elements its impact would be diminished. This can be seen in other parts of the world where some significant advancements have been made but where, in some instances, the absence of one element has been a barrier to greater progress.

The next frontier is to create more consistency in terms of investment and standards across the globe and ensure that these systems are well-connected. In this way the knowledge, expertise and funding to care for threatened wildlife will endure for future generations. This speaks to the value of global initiatives such as the oil industry funded Global Oiled Wildlife Response System (Kelway et al., 2017). While society's energy consumption may be transitioning, threats to wildlife populations will remain. As such there is a need to continue to explore innovative ways to reach-out beyond national borders and work together across countries and stakeholders to address current and future challenges that serve as barriers to effective oiled wildlife preparedness and response.

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International interviews: Kaz Uematsu (NRDA Asia), Louise Chilvers (Wildbase, Massey University), Saskia Sessions-Puplett (Sea Alarm Foundation), Simone Jay (SON Response), Valeria Ruoppolo (Aiuká).

## REFERENCES

Clumpner, C., Dombrowski, D., Mills-Parker, K., Paine, S. and Ziccardi, M. 2018. *Taming wild data: An end to end electronic records system for oiled wildlife response*. In: Interspill Proceedings: 2018 <https://www.interspill.org/wp-content/uploads/2021/11/Taming-Wild-Data-C-Clumpner-Oiled-Wildlife-Care-Network-UC-Davis.pdf>

IPIECA-IOGP, 2014. *Wildlife response preparedness*. IPIECA-IOGP, London, UK. <https://www.ipieca.org/resources/good-practice/wildlife-response-preparedness/>

IPIECA-IOGP, 2017. *Key principles in the protection, care and rehabilitation of oiled wildlife*. IPIECA-IOGP, London, UK. <https://www.ipieca.org/resources/awareness-briefing/key-principles-for-the-protection-care-and-rehabilitation-of-oiled-wildlife/>

Kelway, P., Chilvers, B. L., Grogan, A., Hebert, C., Nijkamp, H. and Ziccardi, M. 2017. *Impact and implications of an international oiled wildlife response preparedness project*. In: International Oil Spill Conference Proceedings: 2017 (1): 1669-1688. <https://doi.org/10.7901/2169-3358-2017.1.1669>

Kelway, P., Holland, R., Sessions, S. and Nijkamp, H. 2014. *Towards a Tier 3 infrastructure for Oiled Wildlife Response*. In: International Oil Spill Conference Proceedings: 2014 (1): 972-985. Doi: <http://dx.doi.org/10.7901/2169-3358-2014.1.972>

Newman, S., Ziccardi, M. Berkner, A., Holcomb, J., Clumpner, C. and Mazet, J. 2003. *A historical account of oiled wildlife care in California*. *Marine Ornithology* 31: 59-64. [https://marineornithology.org/PDF/31\\_1/31\\_1\\_8\\_newman.pdf](https://marineornithology.org/PDF/31_1/31_1_8_newman.pdf)

The Regents of the University of California, Davis. 2022. *About OWCN*. Oiled Wildlife Care Network. <https://owcn.vetmed.ucdavis.edu/about>