

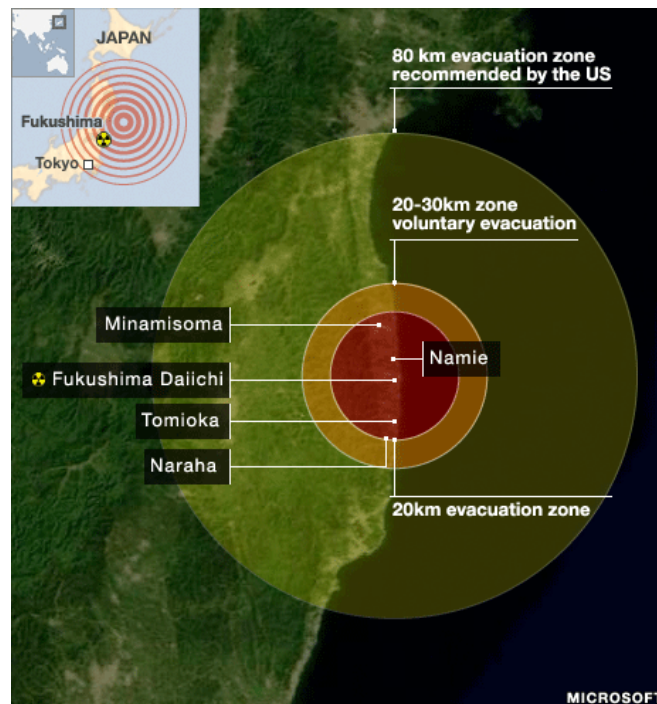
Animal Relief in Evacuation Zones  
Fukushima Prefecture, Japan  
31 March 2011

Proposal

The 2011 Sendai earthquake was the strongest known earthquake to hit Japan, and one of the five strongest earthquakes ever recorded in the world. The earthquake created extremely destructive tsunami waves over 10 meters that struck Japan minutes after the quake, in some cases travelling up to 10 km inland.

In addition to the devastating loss of lives and property, the earthquake and tsunami had a significant impact on the Fukushima nuclear power plant located 170 miles north of Tokyo. Today, the situation at the Fukushima Daiichi plant remains very serious<sup>1</sup>.

On 11 March, there was a mandatory evacuation of residents within a 20 km radius of the plant and residents within 30-kilometer radius have been strongly encouraged to evacuate. There have been recent reports that the mandatory evacuation zone may be increased to 30 km. The U.S. is recommending the evacuation of U.S. citizens and their families within 80 km of the plants.



It's difficult to know with certainty, the number of animals within 30 km of the Fukushima power plant. The International Fund for Animal Welfare (IFAW) interviewed evacuees and were told that animals had been left behind and we have heard from reliable sources that there are a number of livestock and equine operations in the area.

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<sup>1</sup> The IAEA, 29 March

***Knowing the actual number of animals within each 10 km zone is a critical first step in developing an animal relief plan.***

Typically, IFAW conducts assessments for this type of situation in three phases: 1) Aerial view providing “big picture” and GPS data for aggregate populations; 2) Hasty searches through randomly selected, representative areas to make visual count of animals in that area; and 3) Using various formulae based on pre and post-incident population data, evacuation rates, and number of animals seen in a representative area, an estimate of the total number of animals to be evacuated can be developed and available to evacuation and sheltering teams.

There is limited information on the impact that various levels of radiation exposure will have on different species of animals. Experimental irradiations studies show mammals to be most sensitive, followed by birds, fish, reptiles, and insects<sup>2</sup>. Similarly, we do not have a complete understanding of the relationship between *survivability* of animals and proximity to the plant. We can only assume that animals closer to the plants have received greater radiation exposure and therefore, their survivability will be lower, than animals currently residing in the 30 km area.

***A group of subject matter experts (SMEs) will need to convene very soon to make recommendations on which species - and at what distances from the plants - should be evacuated.***

That group of SMEs needs to include representatives well-versed in radiation exposure, animal physiology, animal behavior, animal rescue and evacuation techniques, animal decontamination, animal sheltering and husbandry, wildlife habitat and rehabilitation, and human responder safety. Using the Lessons Learned and Best Practices from this and previous incidents, the committee will develop response procedures and protocols that will serve as the *Response Standard* for similar incidents world-wide. International animal welfare groups and government entities located near nuclear reactor facilities will be looking to this Committee’s recommendations as they develop their animal response plans.

***While the Committee is working on those recommendations, immediate steps need to be taken to ensure animal well-being.***

In some cases, animals have not received adequate food and water for two weeks. A number of considerations and steps can be taken **now** while recommendations are being developed:

- Conduct thorough assessment as discussed above to determine estimated number and species of animals to be evacuated;
- Feed for livestock needs to be distributed quickly to identified farm sites;

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<sup>2</sup> Radiation & the environment: Assessing effects on plants and animals. An overview of a recent report issued by the United Nations Scientific Committee on the Effects of Atomic Radiation. IAEA BULLETIN, 39/1/1997

- Feeding stations in the 20-30 km zones for the pets should be established;
- Food for wildlife distributed in key habitat areas;
- Receiving pet shelters identified, fabricated, and strategically located beyond the 80 km zone and positioned as close as possible to their human families;
- Receiving pet shelters should be staffed, equipped, and fully operational before evacuations occur;
- Information system be made available for evacuees to request rescue of their abandoned animals and to be able to track where their animals are;
- Secure tracking system established and in place for every animal evacuated;
- Decontamination procedures in place and situated at each staging area;
- Veterinary triage teams embedded with rescue and evacuation teams;
- Veterinary care team available at long-term sheltering sites;
- Search and Rescue methodology established to ensure logical and complete evacuation of animals;
- Staging areas identified;
- Transportation methods from staging areas to pet shelters determined and secured;
- Transport cages and equipment secured;
- Properly credentialed, trained rescue and evacuation teams in place;
- Just-in-Time training provided for all positions using SME in lead positions well-versed in Incident Command and Incident Management; and
- Development of an Incident Command Structure.

The International Fund for Animal Welfare recognizes that in times of disaster, human needs must come before animal needs. However, it's been our experience that the two often go hand-in-hand as animal issues become human issues.

***Now that many of the most critical human needs have been addressed, it is appropriate to begin addressing animal needs.***

It has been nearly three weeks since the earthquake and during that time, many animals have suffered and it is now time to start addressing their needs.

Animals are an important part of the Japanese culture and play an important role in the family structure. There is a strong human-animal bond in Japan and at times like this, having animals reunited with their families provides great solace and comfort just when it is needed most. For many Japanese, their pet is a member of the family. Research in the U.S. following a disaster has shown that as much as 30% of evacuees will attempt to re-enter a disaster zone to rescue their pet. Similar research exists that shows that pet owners and well-intentioned animal welfare groups will risk their own personal safety to rescue animals. This was the number one lessons learned from Hurricane Katrina!

***By removing animals from the evacuation zone and reuniting them with their families, we will significantly reduce the number of people attempting to sneak into the danger zone putting their own lives at risk.***

The sooner that we initiate an animal relief plan, the greater the likelihood of controlling cross-zone contamination. We can only assume that animals that are very close to the plants are highly contaminated and we do not want those animals crossing into non-contaminated areas. And that will happen as domestic animals search for food sources. Identifying safe areas to evacuate and completely removing animals from that area will in essence establish a virtual containment zone for highly contaminated animals.

The entire world is watching Japan and how we will address the animal issues. The various websites and social network systems are overflowing with information and misinformation on what is happening with the animals within the evacuation zone.

***By creating a plan that is based on good science, meets animal welfare standards, and embraces transparency and open communication, we will be able to ensure to the rest of the world that everything possible and reasonable has been done for the animals.***

IFAW welcomes the opportunity to be actively engaged in the planning and response phases for this disaster. Please, do not hesitate to contact me if you have any questions.

Sincerely,

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