HFC Committee

From: Andrew Rowan <arowan@wellbeingintl.org>

Sent: Sunday, May 17, 2020 10:29 AM

HFC Committee To: FW: Maui Cat Policies **Subject: Attachments:** Maui Council Memo.docx

Follow Up Flag: Follow up Flag Status: Completed

I understand that there will be a meeting of the Healthy Families and Communities Committee on May 21 next week. Please accept this memo as official testimony to the Committee.

Thank you

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"A man may do an immense deal of good, if he does not care who gets the credit for it." Father Strickland, 1863.

FROM: Andrew Rowan, D.Phil., MA (oxon), B.Sc.

TO: Healthy Families and Communities Committee, Maui County Council

RE: Cat Management

DATE: 18 May 2020

As the Chief Scientific Officer of the Humane Society of the United States (from 2004 to 2018), I was behind the project launched in 2013 to address the outdoor cat situation on Maui. I have been directing funds to the project since 2013 and also tracking its progress over time. I helped launch the project after a conference on Outdoor Cats organized at the end of 2012 in Los Angeles at which Dr Fern Duvall spoke and stated that there were 500,000 cats on Maui. His talk led me to select Maui as an ideal location to launch an outdoor cat management project.

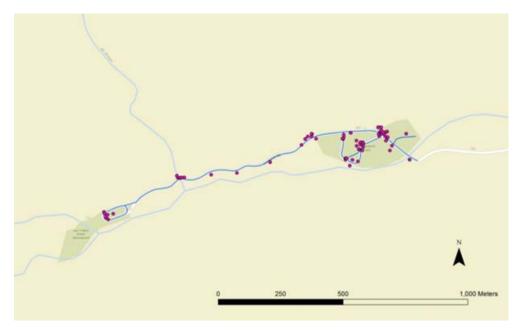
I was recently sent a copy of the Council Minutes of March 10, 2020 with the presentations and comments by various parties on the cat situation on the island of Maui. In his testimony to the Council's Healthy Families and Communities Committee (on March 10, 2020), Dr Duvall claimed that there 300-400,000 outdoor cats on Maui.

From my perspective, Maui presented (and presents) an ideal opportunity to build a sustained program to address the outdoor cat issue and develop realistic and politically acceptable solutions that would address the interests of people, animals and the environment.

When launching the "Maui cat project," my colleagues and I decided that the first task was to conduct a census of cats on the island to obtain some sense of the scope of the problem (this is the census that Dr Duvall referred to in his presentation as being done by the Humane Society of America but it was really commissioned by the Humane Society of the US). Dr John Boone, a population ecologist at the Great Basin Bird Observatory in Reno, Nevada was tasked with conducting the census. He visited Maui and recommended that we start with a limited census focusing on the Iao Valley and the area around Kanaha Pond in Kahului. We agreed.

The maps below show where cats (red dots) were detected in one of daytime counts around Kanaha Pond, in selected Kahului neighborhoods and in the Iao Valley.





Dr Boone estimated a population of around 110-125 outdoor cats in the lao valley and around 1,900-2,050 outdoor cats in the entire Kahului/Kanaha area (approximately 40 sqkm). Therefore, in the main urban area of Maui, there appeared to be around 50 outdoor cats per sqkm (or 36 cats per 1,000 people). [I have been using the cats/1,000 people metric for some time now because cats are not spread evenly across landscapes and tend to cluster in high densities around human habitation but exist at far lower densities in agricultural and conservation land.]

Dr Boone also assessed the proportion of outdoor cats that were sterilized (sterilized cats could be identified by sight because their ears were tipped) and determined that two-thirds or more of the outdoor cats in Kahului were sterilized. However, only about 15% of the cats near the airport were sterilized because a homeless couple prevented the trapping of the "their" cats.

In his report, Dr Boone specifically cautioned against extrapolating his survey data to the entire island of Maui. However, because there are claims that there might be hundreds of thousands of outdoor cats on Maui, I have produced the table below that provides what I would consider a realistic estimate of the total number of outdoor cats. This estimate is based on the following assumptions/observations:

- a) Numerous studies around the world have reported that cat densities in wilderness, conservation and open agricultural areas are typically found to be less than one cat per square kilometer (unless there is a concentrated food source available such as a dense seabird colony which is not the case for Maui conservation areas or agricultural land);
- b) The highest cat densities of 100+ cats per square kilometer are found in urban areas where food is mostly provided by human feeders and care-givers; and
- c) Farmland has relatively low cat densities (below 10 cats per sqkm).

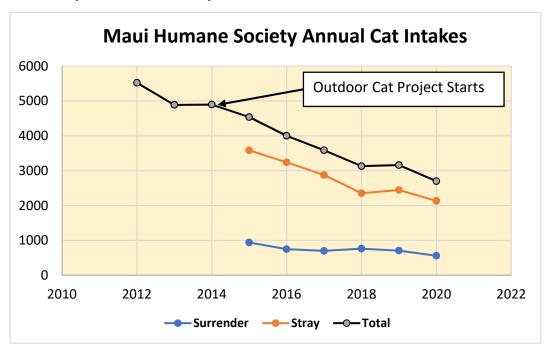
These assumptions then produce the numbers in the table below.

	Area (sqkm)	Estimated Outdoor Cat Density (cats per sqkm)	Total Outdoor Cats
Urban Area	150	100-200	22,500
Rural/Agric Area	1,000	5-10	7,500
Conservation Area	750	1	750
Maui Island	1,900		30,750

The table estimates that the Maui outdoor cat population is 30,750. This is only a rough estimate, but I would be <u>very</u> surprised if there were more than 50,000 outdoor cats on the island.

Following the Boone survey, I arranged for a Connecticut foundation to provide a grant of \$100,000 a year to Maui Humane Society to launch a cat sterilization project. Subsequently, Maui Humane has raised additional funds to support the project which was launched in 2014. While conservation biologists typically discount using cat intakes into animal shelters as an index of outdoor cat numbers, I believe such intake numbers are a reliable index, especially in an enclosed area such as an island.

Therefore, I argue that the impact of the project can be followed by tracking cat shelter intake. The chart below shows almost a 50% decline in cat intake since 2012 with most of the decline being due to a decline in <u>stray</u> cat intake. The Maui Humane Society started its cat sterilization program in 2014 with 631 stray cats sterilized. Since then, they have been averaging over 3,000 stray cat sterilizations a year for a total of over 15,000 sterilizations since 2014.



Over the same period, the number of cats euthanized annually by the humane society has dropped from almost 3,400 in FY 2015 to 340 (projected) in the most recent year (FY 2020). This is a 90% decline in annual cat euthanasias and Maui Humane can justifiably be very proud of the success of its cat project. [I would urge the Council to recognize the success of the MHS

cat project and also recognize the considerable efforts of the many volunteers on Maui who have contributed their time and energy to resolving cat issues.]

Another way to track the success of the sterilization project would be to conduct what is known as index surveys (surveys conducted on a set route to compare changes in the populations of observed/detected animals over time). Determining the proportion of the sighted cat population that is sterilized (how many cats have tipped ears) is a relatively easy exercise and would also help focus cat sterilization efforts in "hot spot" areas. For example, Dr Boone, in his survey, determined that over 80% of the cats in the lao Valley and in certain areas of Kahului were already sterilized.

I suspect that the island of Maui is on the verge of demonstrating what can be achieved with a <u>sustained</u> stray cat trapping and sterilization program. The state of Hawaii has many challenges in addressing threats to its fauna and flora, but the domestic cat need not be a major contributor to those threats if the counties can support measured and sustained programs of cat TNR accompanied by appropriate and innovative policy initiatives encouraging home owners to keep their pet cats indoors or confined to "catios" so the pet cats cannot prey on Hawaiian wildlife. Within a decade, the problem of domestic cats preying on wildlife and being a source of diseases affecting humans and wildlife would be consigned to history.

Biographical note: I have been tracking domestic animal numbers and shelter trends in the United States since 1983 when I launched the Center for Animals and Public Policy at Tufts Cummings School of Veterinary Medicine in Massachusetts. I spent fifteen years at Tufts, during which period I launched the first academic journal on human-animal relations and started the first degree program (in the world) in Animals and Public Policy (a one-year Master's degree). I currently still enjoy an association with Tufts as an Adjunct Professor. When I retired from the Humane Society of the United States in 2018, I and my wife launched WellBeing International as a vehicle to continue to seek solutions for people, animals and environment.