From:	Todd McClanahan
То:	Heather Hannusch; Aaron Davidson; Aaron Johnston; Barrett Durst; Cullen Sartor; DennisEdd Smith; Doug
	Cochran; Erin Turner; Ethan Belicek; James Rice; Jamie Creacy; Jason Hairston; John Alvis; Lisa Fitzsimmons; Nic
	<u>Maloukis; Nina Cardenas; Nyta Brown; Paul Hendrix; Rebecca Manning; Robert Boyer; Shawn Greene; Stephanie</u> Croatt; Tommy Cude
Cc:	Todd McClanahan
Subject:	RE: AFWA: Toolkit to Address Free-ranging Domestic Cats (Felis catus) on Agency Lands
Date:	Monday, June 28, 2021 2:52:00 PM

Thanks Heather for forwarding this. Rodney had asked us to ensure we forwarded out to the parks to ensure we are continuing to do our part to protect our natural resources from all feral animals. I would recommend including this as a discussion point in your next staff meeting and would also recommend including park hosts/volunteers as well since they can get really attached to feral cats and be averse to our management goals.

Todd McClanahan

Texas State Parks – Region 3 Director 1174 Hwy 71 East Bastrop, TX 78602 O 512-308-1475 x224 C 512-332-1089

From: Heather Hannusch <Heather.Hannusch@tpwd.texas.gov>

Sent: Monday, June 28, 2021 8:28 AM

To: Aaron Davidson <Aaron.Davidson@tpwd.texas.gov>; Aaron Johnston

<Aaron.Johnston@tpwd.texas.gov>; Barrett Durst <Barrett.Durst@tpwd.texas.gov>; Cullen Sartor <Cullen.Sartor@tpwd.texas.gov>; DennisEdd Smith <DennisEdd.Smith@tpwd.texas.gov>; Doug Cochran <Doug.Cochran@tpwd.texas.gov>; Erin Turner <Erin.Turner@tpwd.texas.gov>; Ethan Belicek <Ethan.Belicek@tpwd.texas.gov>; James Rice <James.Rice@tpwd.texas.gov>; Jamie Creacy <Jamie.Creacy@tpwd.texas.gov>; Jason Hairston <Jason.Hairston@tpwd.texas.gov>; John Alvis <John.Alvis@tpwd.texas.gov>; Lisa Fitzsimmons <Lisa.Fitzsimmons@tpwd.texas.gov>; Nic Maloukis <Nic.Maloukis@tpwd.texas.gov>; Nina Cardenas <Nina.Cardenas@tpwd.texas.gov>; Nyta Brown <Nyta.Brown@tpwd.texas.gov>; Robert Boyer <Robert.Boyer@tpwd.texas.gov>; Shawn Greene <Shawn.Greene@tpwd.texas.gov>; Stephanie Croatt <Stephanie.Croatt@tpwd.texas.gov>; Tommy Cude <Tommy.Cude@tpwd.texas.gov>

Cc: Todd McClanahan <Todd.McClanahan@tpwd.texas.gov>

Subject: FW: AFWA: Toolkit to Address Free-ranging Domestic Cats (Felis catus) on Agency Lands

Good morning, everyone,

I wanted to pass along this document which Rodney recently sent out. It does a great job of outlining the ecological impact of feral cats. It also covers case studies and methods of control. This toolkit is an excellent reminder to us to be vigilant with feral cat control on our sites. Although there is often a much weightier emotional component of cat control, it is still essential to the protection of our natural communities. As with all feral animals, cats have devastating impacts on native species through disease, predation, behavior alteration, competition, and more. Please see the excerpt below which outlines the impacts cats have on ecosystems.

Please let me know if you have any questions about feral cat control in your sites.

"As obligate carnivores, domestic cats are skilled and instinctive predators that have contributed to the extinction of at least 63 species, which accounts for 26% of all bird, mammal, and reptile extinctions in the modern era (Doherty et al. 2016). In Australia, domestic cats kill an estimated 377 million birds and 1.14 billion mammals annually (Woinarski et al. 2017, Murphy et al. 2019) and are a leading cause of native mammal extinctions (Woinarski et al. 2015). In Canada, an estimated 204 million birds are killed by cats annually (Blancher 2013). In the United States, domestic cats kill an estimated 2.4 billion birds and 12.3 billion mammals each year (Loss et al. 2013). Domestic cats are the greatest direct, anthropogenic threat to birds in the United States and Canada, and their impacts are magnified by the fact that even well-fed domestic cats will hunt and kill wildlife (Blancher 2013, Loss et al. 2013, Loyd et al. 2013, Loss et al. 2015). The annual economic damage caused by free-ranging domestic cat predation on birds in the United States alone has been estimated at \$17 billion (Pimentel et al. 2005). Domestic cats may also impact wildlife through indirect effects such as competition for resources, transmission of infectious agents (viruses, bacteria, and parasites) that can cause disease directly or by environmental contamination (see Domestic Cat Diseases), and hybridization (Medina et al. 2014). For example, domestic cats may compete with native predators for scarce resources, especially where there is close dietary overlap (George 1974; Biró et al. 2004, 2005; Medina et al. 2014; Széles et al. 2018). Predation of wildlife may also result in trophic cascades that indirectly affect one species through competitive release of another (Hawkins et al. 2004). Additionally, domestic cats in the environment can modify the behavior of native wildlife, and these modifications may affect conservation outcomes. Domestic cat presence may alter migratory bird habitat use on the wintering grounds and selection of nesting sites (Marks and Redmond 1994, Ratcliffe et al. 2009). Domestic cat presence may also modify fecundity through the ecology of fear (Beckerman et al. 2007). Bonnington et al. (2013), for example, observed that the mere presence of a domestic cat in the environment was sufficient to reduce the amount of food provided to chicks in the nest and increase the likelihood of predation by another predator."

Thanks, Heather Hannusch