

Reduce pressure on threatened trophy fish through Policy change!



Black marlin being weighed for trophy evaluation.

Executive summary- Recreational trophy fishing for awards is removing the largest and most fecund members of fish populations. There is no policy preventing this in listed threatened species. A simple low cost policy change to the IGFA policies could change this and severely reduce recreational fishing pressures on these threatened populations.

Jeremy Mayer 44695112

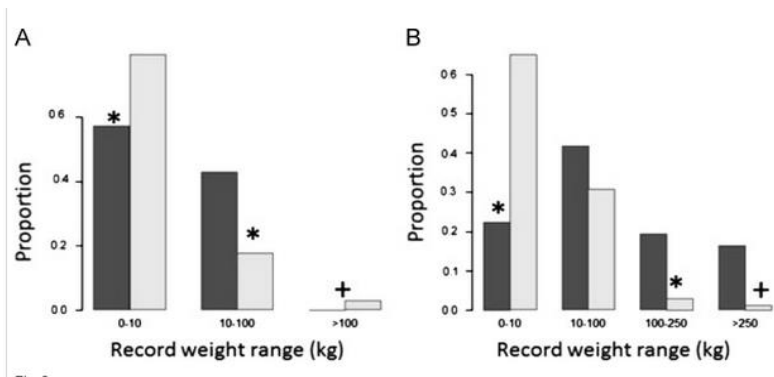
Quick Facts

- 85 species that the IGFA issues records for are listed as threatened by the International Union for the Conservation of Nature (IUCN)
- Mean fish size of trophy fishing in Key West, Florida has declined from 19.9kg to 2.3kg between 1956-2007 (McClenachan 2009)
- 23% of landing of species with populations of concern are by recreational fishers in the United States (Coleman et al. 2004).
- US alone has more than 10 million saltwater recreational fishers.

Introduction

Target trophy fishing is a form of recreational fishing where the fisher aims to catch the largest members of a species in order to achieve an award. The problem with this is that the target fish are the largest of the species and therefore are the most fecund (Shiffman et al. 2014). This raises issues about removing the largest members of a species from a conservation perspective. Recreational fisher motivations allow them to target more isolated areas with rarer fish species. Recreational

fishers are allowed to target species undergoing recovery plans that have been banned for commercial fisheries. The largest recreational trophy fishing organization is the International Game Fishing Association (IGFA). Its most common award system is by mass which means transporting the caught fish to land by which time it dies and cannot be rereleased. Though the probability of breaking the record is extremely low, anglers continue to catch near-record size fish for evaluation thereby constantly removing the largest fish in the population.



(A) Freshwater and (B) marine species proportions of record-setting weights with categories set as small (0–10 kg), medium (10–100 kg), large (>100 kg), and very large (<250 kg). Dark bars indicate Threatened species, while gray bars indicate Least Concern species (Shiffman et al. 2014)

Recommendations and conclusion

If we removed records for these threatened fish anglers could still catch 93% of species that records are issued for. This would remove a large pressure to the populations of these threatened species allowing them a chance to recover. We recommend that the IGFA change their policy and issue a declaration that they will remove all weight certifications for species listed as threatened by the IUCN. This would

reduce the interest in catching these species and so also remove their recreational fishing pressure. I also recommend changes in the IGFA policy to allow for regional based analysis of populations as some IUCN listings are on a more regional scale than a global scale. New policies on validating fish size such as by digital cameras or smartphones should be incorporated into their policy. There are few policy changes that could achieve so much with so little cost yet this is one of them.



striped marlin in it's natural environment

References.

- Black marlin weigh-in. Accessed 27 Nov. 2014 at <http://fishindex.blogspot.ca/2009/12/black-marlin-makaira-indica.html> Coleman, F., Figueira, W., Ueland, J., & Crowder, L. (2004). The impacts of United States recreational fisheries on marine fish populations. *Science*, 305, 1958-1960.
- McClenachan, L. (2009). Documenting loss of large trophy fish from the Florida Keys with historical photographs. *Conservation Biology*, 23, 636-643.
- Shiffman, D., Gallagher, A., Wester, J., MacDonald, C., Thaler, A., Cooke, S., & Hammerschlag, N. (2014). Trophy fishing for species threatened with extinction: A way forward building on a history of conservation. *Marine Policy*, 50, 318-322
- Striped marlin in its natural environment accessed 27 Nov 2014 at <http://www.amosphotography.com/index.php?p=-1&a=-1&at=-1>