Honey Bees Have Gone From Endangered To Dangerous - And That Is A Science Journalism Problem

By Chuck Dinerstein, MD, MBA — January 29, 2018

It has been a tough decade for the honeybee; first they were **suddenly dying** due to something called Colony Collapse Disorder and when that was shown to be just the kind of blip they have had in deaths since the first recorded notes on domesticated beehives, they have been implicated as damaging the environment, because there are too many of them.

How can this bee?

First, some information. Our beloved western honey bee, *Apis mellifera*, is a pollinator, but it is one of just over 25,000 bee species. We don’t even know how many there actually are because only just over a handful of bee species have hives and can be readily estimated. But domesticated honeybees are involved in the production of over 70 percent of global crops. That, rather than honey, is their agricultural driver. We cultivate western honey bees just like chickens, cows, and pigs. In some ways, their prominence among the tens of thousands of pollinator species speaks to our use of them as ‘monocultures.’ And it is this human use that is the subject of new environmental concern.

**Counting the bees is not possible**

The authors make the point that the recent concerns about the collapse of pollination, used to inspire our environmental spirit (i.e. donations), is more an “issue of agricultural rather than environmental importance.” They assert that our use of honey bees as an agricultural tool, moving them from pollination site to pollination site, is equivalent to introducing a new, extensive species
into each area. The authors speculate that with each conquering invader the indigenous wild species lose their share of resources and may be further afflicted by disease carried by the honey bee “invaders.”

Disease. Brought by parasites like varroa mites, which can only be killed by pesticides. And pesticides were the thing that groups promoting Colony Collapse Disorder said were causing honey bee die-offs before they said anthropogenic honeybee use was leading to too many honey bees and killing wild bees.

The authors suggest we need a better assessment of how to deploy our honey bee forces; more specifically, in what numbers, in what times and where; and we should take into account the effect on local pollinators. That is a fine idea but difficult. Colony Collapse Disorder only became a concern because we rely on voluntary surveys from beekeepers, so as beekeeping became a fad business (to prevent die-off) and amateur beekeepers killed more bees due to inexperience, they reported those die-offs and those were linked to science. With wild local pollinators, any number used as a baseline is sheer speculation. As stated above, only a minuscule fraction of pollinators even have hives that can be used to count.

From endangered to dangerous

When faced with concerns about Colony Collapse Disorder, Europeans restricted the use of targeted neonicotinoid pesticides [6] that ward off real plant pests, and then to offset a crisis that wasn't happening, Europeans put more honey bees everywhere – interfering with the entire ecosystem at once. Yet they claim they did it “for the environment.”

Biodiversity is good, I get that, and the editorial certainly presents a provocative claim for how humans may impact our environment in unintended ways. But all of this was known and yet media and government were presenting a different human-centric story: That the collapse of honey bee pollinators, a threat to both them and us was the result of neonicotinoid interference. Now it is agriculture, organic and conventional, which includes all of those small beekeepers that cropped up to save the western honey bee.

Media, fed by environmental press releases, move the goalposts. If they get enough attention, governments act, regardless of the science.

From the editorial:

crop pollination by managed honey bees should not be considered an ecosystem service because those pollination services are delivered by an agricultural animal and not be the local ecosystem.

…. Beekeeping is an agrarian activity that should not be confused with wildlife conservation.

Why didn't we get the more nuanced story before? When the honey bee goes from endangered to dangerous in a year, is it any wonder that our trust in science journalism is in the cellar? It probably makes you feel manipulated, just like it does me. Why are we informed in soundbites when there is an equally compelling but more inclusive story to be told?