

Hello Friends of Grizzly Bears,

As we greet an early winter, and bears continue to fall prey to hunter and other conflicts, the issue of coexistence becomes ever more important. At the end of this newsletter or at the address below is the second part of David's blog: *Contingencies of Coexistence, Part ll: Diagnosing the Landscapes*

https://www.grizzlytimes.org/single-post/2017/10/29/Contingencies-of-Coexistence-Part-II-Diagnosing-the-Landscapes

This from David's introduction:

"The most useful follow-on applications are to first recognize how each group generically responds to different modes of engagement, at least in service of promoting coexistence between people and large carnivores, and then apply these characterizations to the diagnosis of coexistence challenges in specific landscapes. Such applications can facilitate efficient insightful initial orientation, but perhaps more importantly also an appreciation of the contextual complexities of bringing about the peaceful cohabitation of people and predators such as wolves and grizzly bears.

In what follows, I first talk a bit about the necessity of multiple motivators—including coercion—and then apply all of what has preceded to a diagnosis of six different and emblematic landscapes in the northern US Rockies. Among my several purposes is to call out the increasingly numerous pliers of platitudes among environmentalists and wildlife managers who would have us believe that the art and science of coexistence is tantamount to a sound bite."

The Yellowstone grizzly bear body count continues to mount. Thus far, IGBST has counted 47 dead grizzlies, and we have a month or so before bears den. As others have pointed out, over 50% of the deaths are under investigation – so, killed by hunters or otherwise shot.

Importantly, only two of these mortalities occurred outside the Demographic Monitoring Area (DMA), so according to the new rules, they are not counted in the agency's assessment of whether allowable mortalities levels have been breached. This is in contrast to last year: because of 20 out of the total of 58 bears dying outside the PCA, in 2016,

mortality limits were not violated. But in 2015, the first year the agency applied this new method, only 10 of the 61 total died outside the DMA – and allowable mortality limits were violated for females. (The limit was 18 dead females, and 25 died -- so not a subtle violation).

There is a very good chance that mortality thresholds have been breached this year, but we won't know for sure till IGBST releases the count of females with young, which it uses to estimate total population size.

It is important to keep in mind the unreported/unknown deaths, which IGBST estimates at 1.5 times the total known and probable deaths. (These are always included in the tallies in the IGBST reports). So, with 47 considered known or probably dead, as well as roughly 24 unknown/unreported losses, we have a total of 71 dead bears dead so far this year. That is more than 10% of the total population size estimated last year. We should be using the total dead bear figure of 71 in the press.

Needless-to-say, David also expects the population decline of the last 3 years to continue. He will update the graph here (actually 3rd graph down): https://www.grizzlytimes.org/maps-and-graphs

The hottest story of the past few weeks is the publication of a paper by IGBST in the journal Ecosphere that looks at connecting landscapes between the GYE and NCDE. Authors note that in the last few years, male bears have been closing the distance between the NCDE and GYE and predict that in the next 5-10 years, a bear might complete the trip. Here are some links, including to a piece in the NYT.

https://www.nytimes.com/2017/11/03/science/grizzly-bears-yellowstone-genes.html?hpw&rref=science&action=click&pgtype=Homepage&module=well-region%C2%AEion=bottom-well&WT.nav=bottom-well http://www.wyofile.com/column/potential-paths-grizzly-bear-identified/http://www.jhnewsandguide.com/news/environmental/hopping-ecosystems-will-be-hard-for-griz/article_f59e9c1f-58df-5d6b-809d-d186a9bc2e51.html

These comments on the paper by David:

"The paper contains no surprises and pretty much duplicates previous research by Randy Boone and Malcom Hunter from 1996, Rich Walker and Lance Craighead from 1997; plus work by Sam Cushman for black bears published in 2009. This paper is notable only because it uses the latest statistical gimcrackery to reiterate the obvious already highlighted by previous researchers. But because it was produced by the IGBST, the assumption is that the work is conferred more legitimacy.

More notably, though, is the relatively narrow scope of the work, specifically an exclusive focus on direct paths between the GYE and NCDE rather than a broader look at the configuration of connectivity among all recovery areas. With that point in mind, I find it remarkable that central Idaho was not considered. Central Idaho is a logical consideration if for no other reason than the fact that the most promising connective

habitat lies between Yellowstone and central Idaho and thence north to the NCDE and the Cabinet-Yaak. Regional analyses by Carlos Carroll published in 2003 and by Troy Merrill and myself in 1999 highlight these linkages as being even more promising over the long-haul than the routes featured in the IGBST paper. And grizzly bears dispersing from the NCDE are closer now to central Idaho than to Yellowstone, and grizzlies from Yellowstone closer as well to central Idaho by way of the Centennials. Given the potential capacity of central Idaho to support grizzlies, this area is critical when it comes to connectivity.

Insofar as whether this paper foreshadows the prospect of genetic connectivity in the near future? Yes, probably, if grizzlies are assiduously protected in the identified regions. But prospects are that Montana will institute a more lethal regime, whether by sport hunting or by other means, that will compromise these prospects. Grizzlies on the periphery are precisely the ones most vulnerable to the deployment of more lethal means to resolve and prevent conflicts. And all of the states have authoritatively stated on several occasions that, first, they want to reduce the size of the Yellowstone grizzly population and, second, that any provisions attached to delisting are entirely discretionary.

Further, since delisting, we now have a large gap in this potential connective habitat on the GYE end between the DMA and DPS boundaries. In this interval there are no incentives for the state to keep grizzlies alive. Live bears in this zone don't count towards any population thresholds monitored by the Fish and Wildlife Service, nor do any dead bears count against. This is a critically important zone within which we are presumably supposed to surrender all doubt and lapse into vacuous trust insofar as grizzly bear management and connectivity are concerned.

A final observation: I find these sorts of modeling exercises to be a bit inane by first principles. They presuppose individual bears essentially sprinting several hundred miles between ecosystems. This does not happen nor will it. The more realistic way of framing connectivity is in terms of long-term occupancy-bears taking up residence, surviving, and then reproducing over a period of many years. This was clearly not an explicit or even tacit consideration in the IGBST analysis."

In other news, the state of Wyoming is now soliciting comments on post delisting grizzly bear management. WGF is holding public meetings in the state till mid-November: https://wgfd.wyo.gov/News/Game-and-Fish-invites-the-public-to-talk-about-gri

Also, north of the 49th, in a major blow to the protection of religious freedom of First Nations, the Ktunaxa Tribe recently lost their case in Canada's supreme court that challenged the Jumbo Ski Resort in southeastern BC. This also does not bode well for pending First Nations' challenges on similar grounds of other developments, including the construction of pipelines.

 $\underline{https://beta.theglobeandmail.com/news/british-columbia/top-court-rules-bc-ski-resort-approval-doesnt-violate-indigenous-}$

rights/article36806716/?ref=http://www.theglobeandmail.com&

Lastly, under the leadership of Chairman Rob Bishop (R-UT), the House Natural Resources Committee recently passed 5 bills that would gut the ESA. He has called the ESA "a political weapon for extreme environmentalists." Of particular concern is the move to require FWS to consider the "likelihood of significant, cumulative economic effects" of listing an animal or plant. A major showdown over the law looms. http://www.heraldnet.com/nation-world/lawmaker-working-to-invalidate-the-endangered-species-act/

On that happy note, we are still For the bears,

Louisa