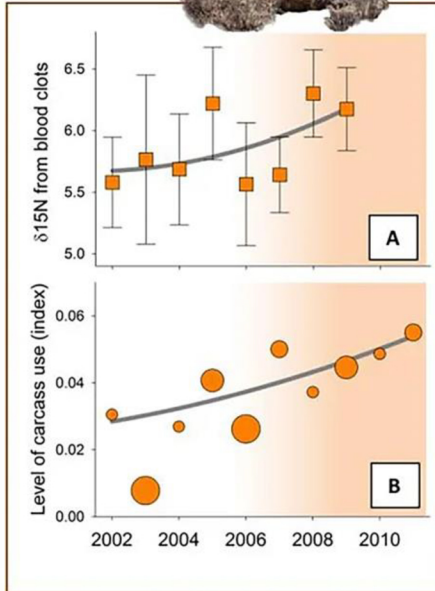


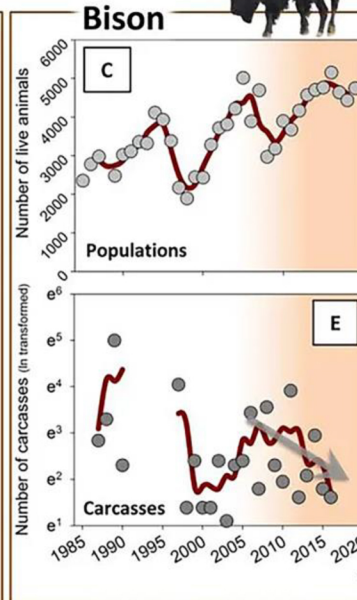
Trends in Availability & Consumption of Meat – Yellowstone Ecosystem

Grizzly Times <https://www.grizzlytimes.org/trends-in-habitat>

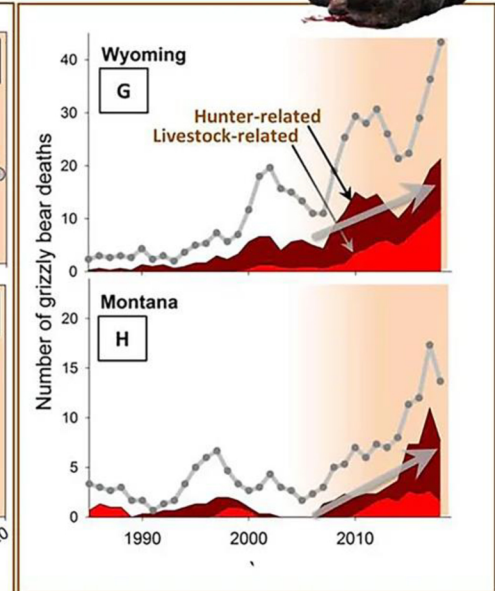
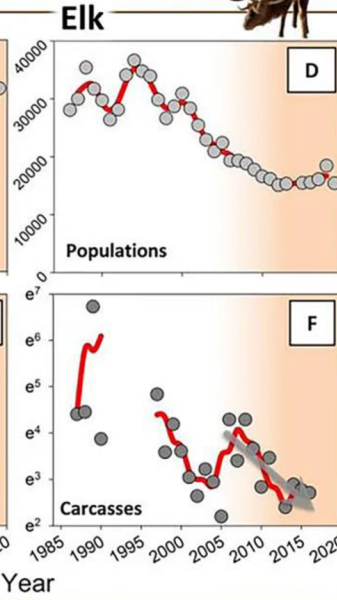
by David Mattson



Consumption of meat



Native ungulate populations & winter kill



Meat-related bear deaths

These graphs show trends in availability of elk and bison as well as consumption of terrestrial meat by grizzly bears in the Greater Yellowstone Ecosystem (GYE)—all with consequences for levels of meat-related conflicts with humans. Graphs (A) and (B) show two indicators that reveal substantial increases in meat consumption by grizzly bears in the GYE coincident with terminal losses of whitebark pine seeds (the period denoted by vertical shaded orange). Graphs (C-D) show trends in total numbers of bison and elk 1985-2019; graphs (E-F) show trends in total numbers of carcasses of each species available to scavenging grizzly bears during spring on ungulate winter ranges. Note the correlated decline of both live and dead elk preceding and during the period of terminal whitebark pine loss, and the paradoxical disconnect between numbers of live and dead bison. The decline in numbers of bison carcasses is of consequence given that bears consume almost all meat from bison by scavenging. The increasing reliance of bears on meat coincident with declines in availability of this resource from native ungulates has resulted in grizzlies increasingly exploiting livestock and the remains of elk killed by big game hunters, leading to the substantial increases in numbers of bears being killed by humans because of meat-related conflicts in both Wyoming and Montana, evident in graphs (g-h).