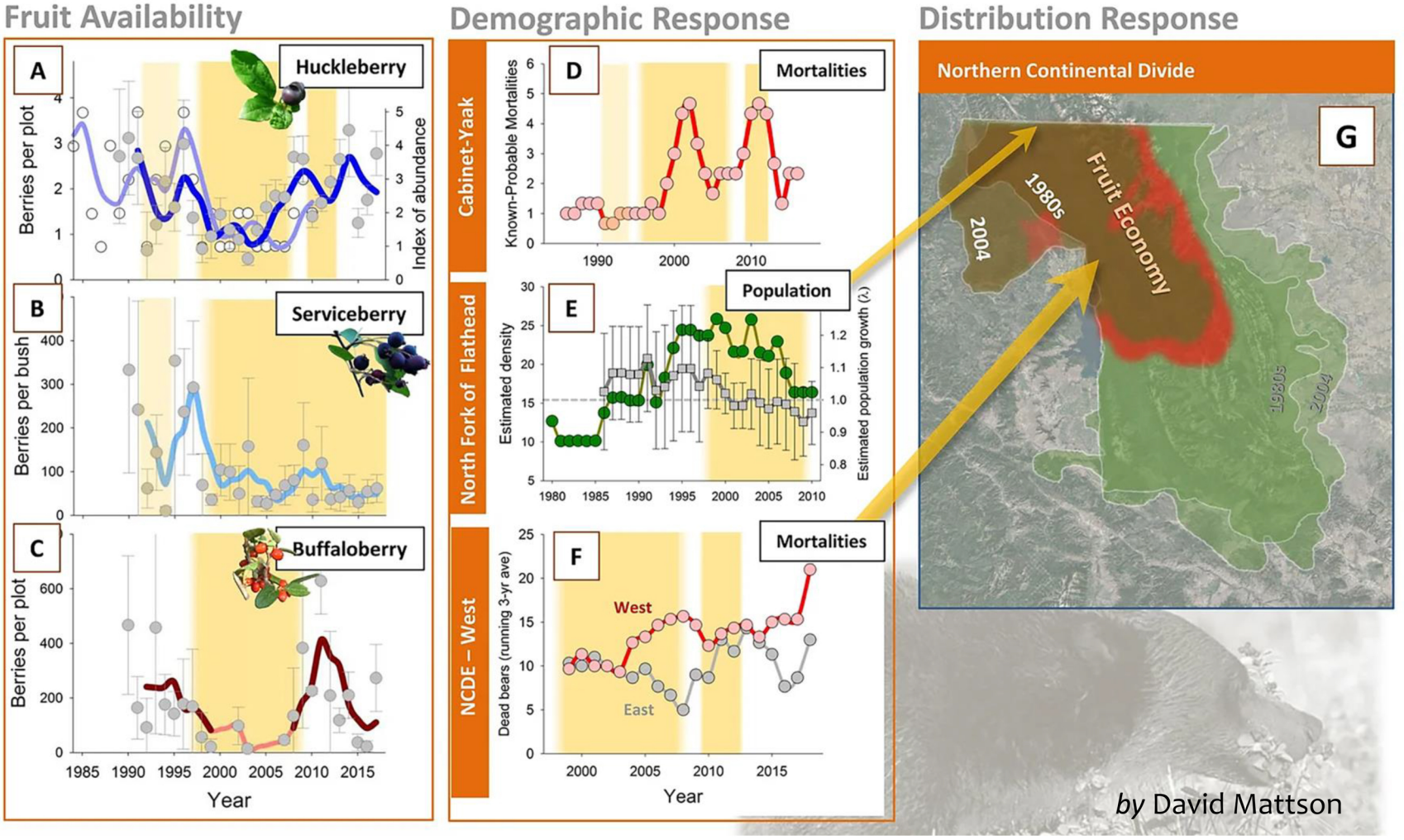
Effects of Fruit on Demography & Distribution – Nothern Continental Divide

Grizzly Times https://www.grizzlytimes.org/foods-demography



These graphics show (A-C) variation in availability of major fruit crops to grizzly bears in the Cabinet-Yaak Ecosystem (CYE) and western portions of the Northern Continental Divide Ecosystem (NCDE); (D-F) demographic responses to this variation; and (G) associated changes in grizzly bear distribution in western portions of the NCDE. Annual variations in fruit crops were monitored by Wayne Kasworm and Bruce McLellan; associated changes in grizzly bear population density and growth rate were estimated by Bruce in the North Fork of the Flathead River Valley (E). The geospatial focus of these graphics is on areas where bears rely most heavily on fruit, shown is shades of red in (G). The most notable patterns are a synchronous dearth of fruit from huckleberry, serviceberry, and buffaloberry during a "berry famine" that lasted 1998-2008; related spikes in grizzly bear mortalities in (D) the CYE and (F) western portions of the NCDE (in striking contrast to in eastern portions, where mortality actually declined); associated declines in bear density and population growth rate in the North Fork of the Flathead (E); together with a major increase in distribution of bears westward from the NCDE (G). The berry famine clearly drove a spike of largely human-caused grizzly bear mortalities, declines in bear densities, and a rapid synchronous increase in bear distribution, presumably as bears ranged more widely in search of alternate foods or came into conflict with humans for the same reason.