War in the Cold:

The "Little Ice Ages"







All of these wars occurred in the cold— --in "little ice ages" that lasted 350-550 years.

Little sunlight: short growing seasons with heavily overcast skies.

Massive regional droughts extended for up to 350 years.

Heavier floods drowned farmers—and their fields.

Crops failed across cultures and around the world.

They couldn't feed their cities.

Governance failed

War, rebellions and invasions followed.





RUIN SPREAD

80% of china's tumultuous wars occurred in the "little ice ages."

Locusts.

Epidemics

Rebellions

Invasions

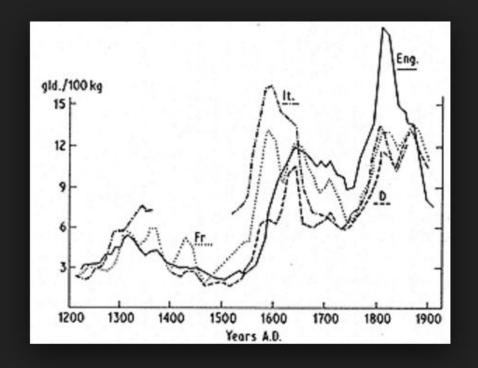
China in the cold-- AD 1600-1899 (900 years)

- 243 wars
- 267 rebellions
- 81 major floods and droughts
- 40 "natural calamities"—typhoons, epidemics and more-extreme cold



Europe's "War Peak" in the 17th Century





Fepar indrunes.

40.000

1 84

Europe– 17th-century "General Crisis."

Worst civilian war in history-"30-Years War"--as Catholics fought
Protestants. 1618-1648

Trampling Armies

Fleeing Farmers

11 million deaths

Europe also got the <u>"Black Death"</u>—2nd global bubonic plague epidemic. (The first was during Dark Ages droughts, AD 540-740.)

Killed 30-60 % of Europe's population over three centuries.

Bubonic plagues always start with long droughts in western China's steppes.

Traders, steppe warriors spread the plague to the West.

Millions of deaths, no treatment or prevention.

Central Europe—1621-31

France 1628-31

Italy 1629-31, 1639-52

Austria 1679-80



China

Population dropped <u>43 percent</u> between 1620 and 1650—extreme cold, floods, famines, wars, rebellions—and bubonic plague

(The plague epidemics ALWAYS started in China. Drought starved plague-carrying fleas' rodent hosts, forced them to seek new hosts.)



Global War Peak—Europe--19th Century

Napoleonic Wars--1804-13.

Death toll: 4-6 million.

Major rebellions in Ireland, Belgium,

Albania, Hungary

Crimean War

Russia, Britain, France and the

Ottoman Turks.





FOOD NOW ABUNDANT—no longer key societal constraint.

Farm output in future will decline with earths declining population.

ENERGY IS THE NEW CONSTRAINT

WWII fought over it.

Greens have seized it as critical attack point.

APPALLINGLY, we <u>almost</u> voted voluntarily to renounce our energy—<u>without</u> real evidence of man-made warming.