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To: Dan Breedon

Fr: Ed Miller

Subj: Urban heat island effects, compassionate carnivores and illness prevention

Background: Cutting into "wicked" problems like urban heat islands, food animal management and illness prevention is challenging but could play a part in the Butte County general plan.

Ref A: [http://en.wikipedia.org/wiki/Urban\\_heat\\_island](http://en.wikipedia.org/wiki/Urban_heat_island), 7/19/2009

Ref B: <http://www.epa.gov/heatisland/> 7/19/2009

Ref C: C. Friend, The compassionate carnivore, De Capo Press/perseus books group, 2008

Ref D: American medical association, Complete guide to prevention and wellness, Wiley 2008

Highlights and comments:

1. Ref A & B examine the urban heat island (UHI) effects associated with the albedo/heat capacity of roofs and surface structures impact on weather/climate, health, energy use, global warming and agriculture. The secretary of energy is recommending that at a minimum, stakeholders should recognize the albedo of replacement roofs as the primary selection criterion at essentially zero incremental cost. From a systems point of view, there are many tradeoffs when considering overall mitigation strategies. Stakeholders in Butte County rural areas and over dense mixed conifer forest regions in particular deviate from the U.S. norm. The addition of close-in unique deciduous trees near dwellings/parking lots can aggravate wildland fire susceptibility, consume additional water, provide marginal fiber utility and shorten the growing season. This can lead to analysis paralysis. Google lists 39 million references on UHI. Ref A provides a good introduction to the subject and Ref B provides good examples of specific code recognition of this problem. Ancillary considerations such as the reduced maximum heat input from wildland fire and improved normal roof survival statistics may need to be considered before recommending local code requirements.
2. Ref C examines the issue of happy meat animal management and the effect on human health and economics. This book extends Hamilton's Deeply Rooted book that I reviewed previously. Community supported agriculture (CSA) is an example of a key element that may need to be supported at the county level.
3. Ref D examines the issues involved in preventing illness, staying healthy and living longer. Increased cost of health care and more equitable distribution of health care dollar over a large population group can force a review of current knowledge of health as embodied in Ref D as updated by publications such as U.C. and the Mayo clinic health notes. At the county level, improvements in communication, fitting of support skill levels and providing local health facilities are examples of interest.