

Rocky Mountain Land Use Institute

IT BETTER BUG YOU: STOPPING THE INSECT ARMAGEDDON



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INSECT ARMAGEDDON

- Decline In Pollinators Like Honey Bees Troubling—But Just Tip Of Iceberg

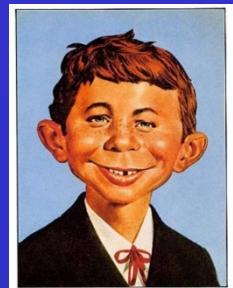


- Monarch Butterfly Plight Is Cautionary Tale





INSECT ARMAGEDDON: WHAT, ME WORRY??



- 10 QUINTILLION INSECTS ON PLANET
- INSECTS MAKE UP 80% OF ALL ANIMALS
- THEY ARE ANNOYING CRITTERS



INSECT ARMAGEDDON: WHY WORRY??

- WINDSHIELD EFFECT
- 76% DECLINE IN FLYING INSECTS IN GERMAN NATURAL AREAS
- 80% DECLINE IN NEW HAMPSHIRE BEETLES
- MAYFLY DECLINE BY 50% SINCE 2012 IN UPPER MIDWEST



INSECTS: FIVE CRUCIAL ECOSYSTEM JOBS

- POLLINATORS
- PROVIDERS
- PEST CONTROLLERS
- DECOMPOSERS
- SOIL ENGINEERS



INSECT ARMAGEDDON: WHAT'S BEHIND THE CRISIS

- CLIMATE CHANGE
- FARMING/RESIDENTIAL PESTICIDE USE
- HABIT LOSS TO AG/DEVELOPMENT





INSECT ARMAGEDDON: WHAT CAN LOCAL GOVTS DO?

- PROTECT/RESTORE HABITAT
- PHASE OUT PESTICIDE USE
- PROMOTE COMPACT DEVELOPMENT
- ADDRESS CLIMATE CHANGE
- LEAD BY EXAMPLE

Key Elements of a Successful Local Bug Protection Program

LESSON #1: NEED A WELL-ROUNDED IMPLEMENTATION STRATEGY.



“If the only tool you have is a hammer, everything begins to look like a nail”—Mark Twain

Key Elements of a Successful Local Bug Protection Program

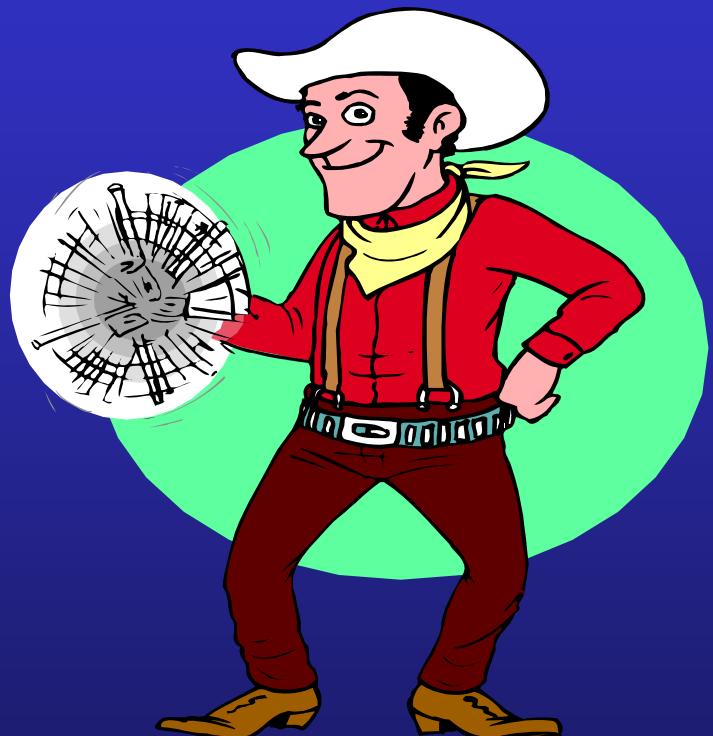
- PLANNING
- ACQUISITION/
FUNDING
- RESTORATION
- EDUCATION/LAND-
OWNER OUTREACH
- LEAD BY EXAMPLE
- REGULATORY



Key Elements of a Successful Local Bug Protection Program

REGULATORY:

“In the West, a six-shooter and a smile are more persuasive than a smile alone” --Teddy Roosevelt





Key Elements of a Successful Local Bug Protection Program

- Remove Regulatory Barriers
- Create Regulatory Incentives
- Enact Protective Regulations

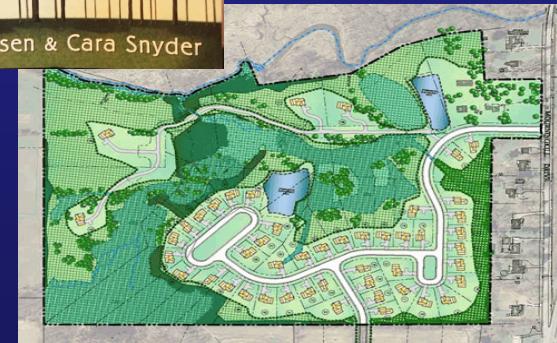
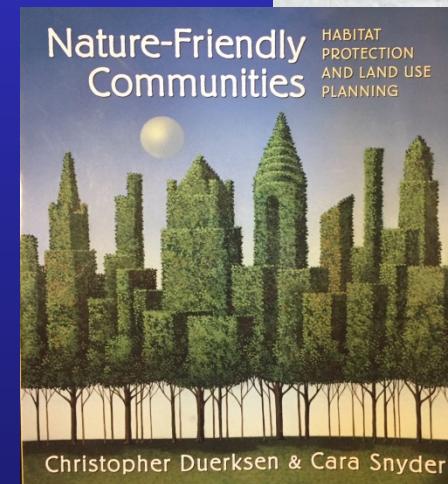
REMOVE REGULATORY BARRIERS

- ALLOW BEE KEEPING IN RESIDENTIAL AREAS
- COMMUNITY GARDENS AS PERMITTED USE
- ALLOW FRONT-YARD VEGETABLE GARDENS



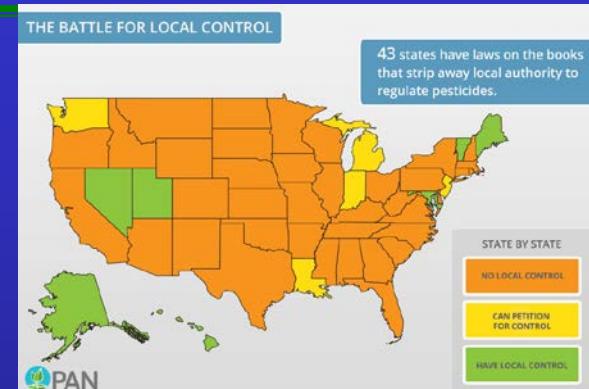
CREATE REGULATORY INCENTIVES

- OFFER DENSITY BONUSES FOR INSECT-FRIENDLY LANDSCAPING IN REQUIRED OPEN SPACE
- PROMOTE CONSERVATION SUBDIVISIONS IN RURAL AREAS



ENACT PROTECTIVE REGULATIONS

- REQUIRE REDUCED USE OF PESTICIDES IN LANDSCAPED AREAS.
- FORBID EATING OF BUGS.
- REQUIRE USE OF POLLINATOR-FRIENDLY VEGETATION.
- SPECIFY INSECT-FRIENDLY BUFFERS ALONG RIPARIAN HABITAT AND AROUND STORM-MANAGEMENT DETENTION AREAS



IMPLEMENTATION

DIFFERENT STROKES FOR
DIFFERENT FOLKS—TAILOR TO
COMMUNITY SIZE, ENVIRONMENT,
POLITICS

