Task Force on Pollinator Health

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Task Force on Pollinator Health

- **Task Force on Pollinator Health was established during 2014 Legislative Session by the enactment of House Bill 4139.**
- **The Task Force held seven meetings from June through October 2014 and submitted its report to the HAGNR committee in December 2014.**
- **The Task Force had 10 members including two legislators.**

Priority Recommendations

- **Oregon should develop a strong, effective outreach and education strategy on pollinator health.**
- **Oregon should fully fund a state-of-the-art-bee health diagnostic facility.**
- **An integrated pollinator health research plan should be developed and funded.**
- **A sustainable revenue stream to fund the proposed outreach, education and research programs needed.**

Current State of Pollinators

Who are efficient pollinators?

Humans or Bees

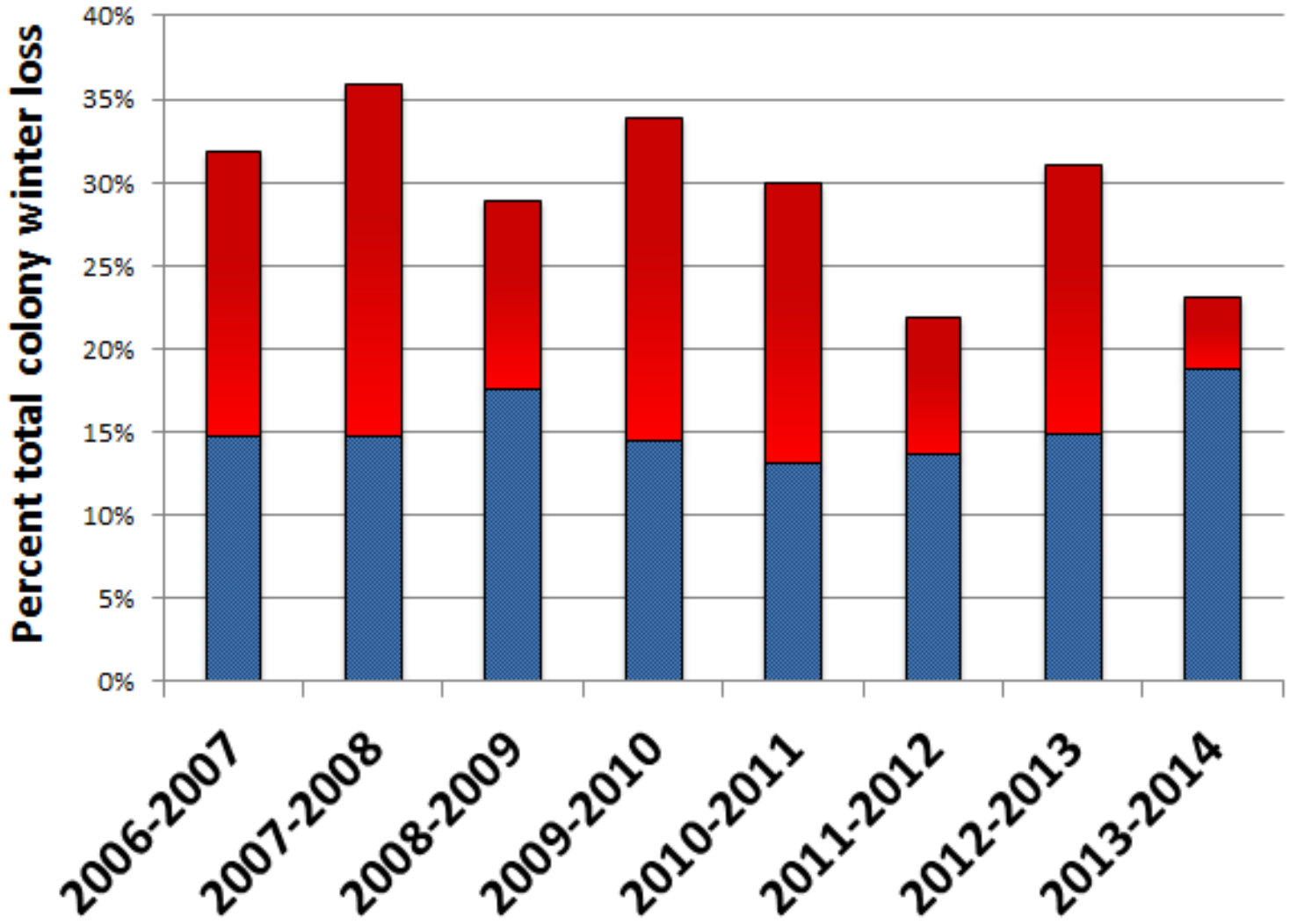
Bee pollination in the U.S. : ~ $ 20 billion

Bee pollination in Oregon: ~ $ 500 million

Bees pollinate more than 90 different crops

Managed honey bee colonies in Oregon: ~ 65,000

Managed honey bee colony losses in the US



Courtesy: BIP

Honey Bee Colony Declines

Complex, Multifactorial and Dynamic

Malnutrition

Parasites & Diseases

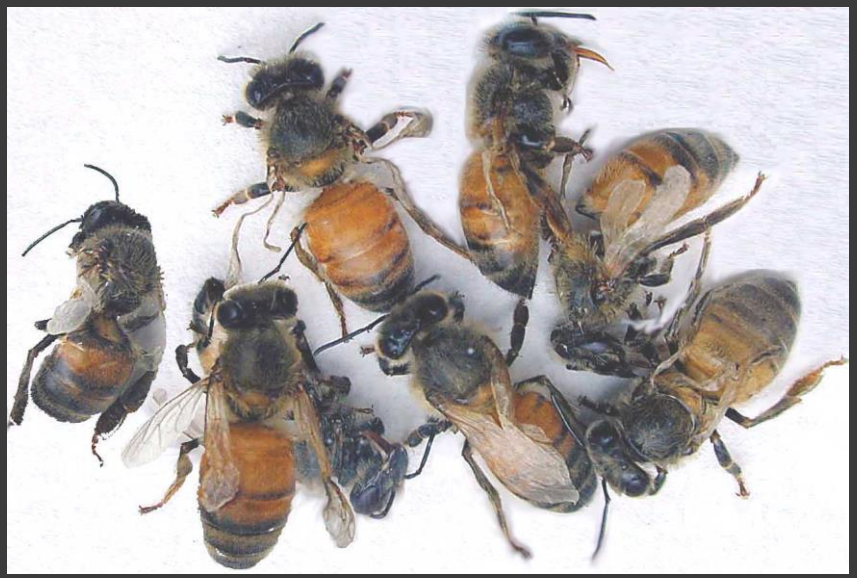
Pesticides

Low Genetic Diversity

Miticides for *Varroa* control

Varroa mite

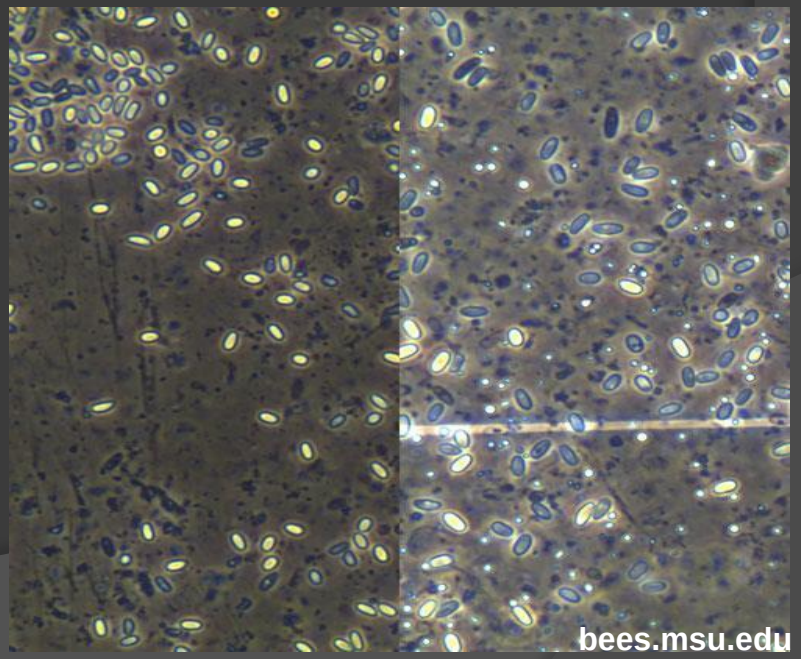
Varroa destructor



Viruses: **Deformed Wing Virus, Kashmir Bee Virus, IAPV, CBPV**

Nosema

Causes diarrhea and energetic stress in bees



POOR BEE NUTRITION

Monocultures, hybrid crops and loss of bee habitat have restricted the bee diet

Pesticides

- Pesticides have received significant attention since the past 7 years.
- Additive and synergistic effects of multiple pesticide exposures is a concern (many pesticides are lipophilic and persist in wax).
- Neonicotinoid's are highly toxic to bees, systemic and are the most widely used class of insecticides for pest control.
- Sub-lethal effects of neonicotinoid's have been shown on foraging behavior, learning and memory and homing abilities of bees.
- Realistic exposure of bees to neonicotinoid's is a challenge.

Rec II. Bee Health Diagnostic Facility

- A state of the art diagnostic facility will help beekeepers obtain much needed timely information for timely management of hive problems to reduce colony mortality that will lead to sustainable beekeeping. A thriving beekeeping industry will enhance agricultural production in the state.

- Bee diagnostic facility will also assist with analysis of native bee pests and pathogens.

- Will aid ODA during bee kill investigations.

Bee Health Diagnostic Facility

- Task Force recommendation:
- Personnel (4 FTE): $1 Million
- Equipment (Capital Expenditure): $500K (one time)

- Current OSU Statewide Programs request of $16 million for new programs (Senate Bill 657) includes: 2 FTE ($500K)

- Equipment request $500K listed above is not in the above OSU Statewide request.

Rec I. Outreach and Education

- The task force members strongly agreed that outreach and education were absolutely critical to address pollinator health issues.
- Develop appropriate educational information to reach the intended audience (licensed pesticide applicators to household users in an effective way).
- OSU and ODA are currently conducting significant outreach and education and are stretched too thin.
- For greater impact we need significantly more targeted outreach and education programs that are only possible with additional funding.

Outreach and Education

- Task Force recommendation: Support a direct appropriation to the OSU Extension for outreach and education on pollinator health.
- Total funds needed not specified in the report.
- Current OSU Statewide Programs request of $16 million (Senate Bill 657) includes: 1 FTE ($250K) for outreach and education.

Thank You !!

Questions???