

Spotted wing drosophila: Update 2017



Agriculture and
Agri-Food Canada

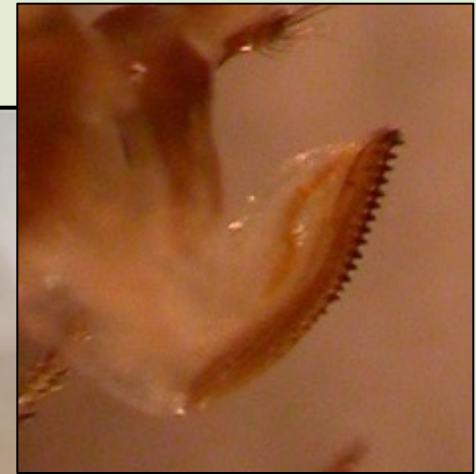
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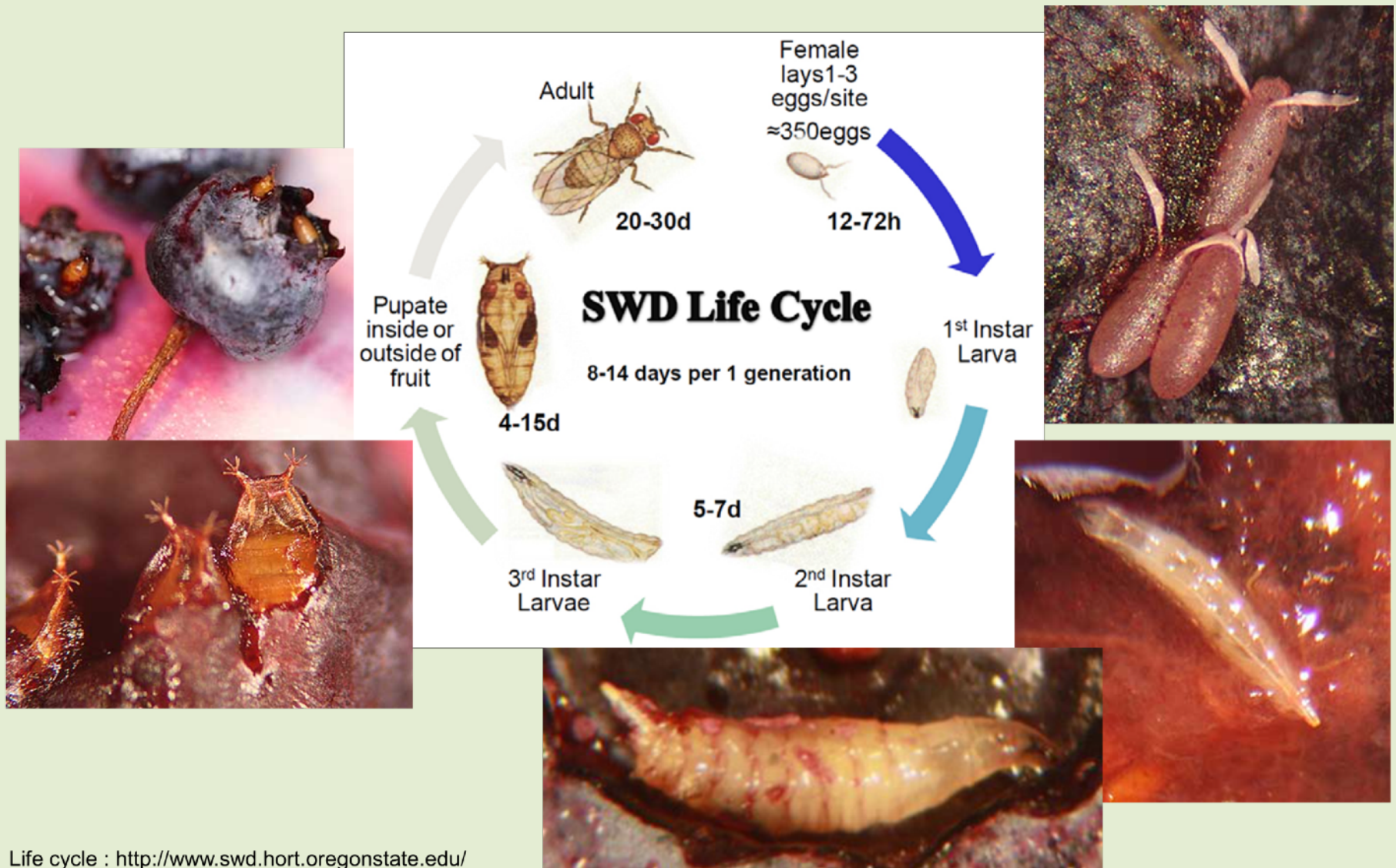


The Pest

- Spotted wing Drosophila, *Drosophila suzukii*
- NS in 2011



Life Cycle



Fruit Damage



Methods - Traps & bait

MONITORING SINCE 2011

- Weekly sampling
- 16 oz red Solo® plastic cups
- Black 'contrast' band with $\frac{1}{4}$ " holes
- 1 m stakes
- 10% solution (ACV + 95% ethanol)
- Yeast attractant
 - (0.95g yeast, 1.9g sugar, water)

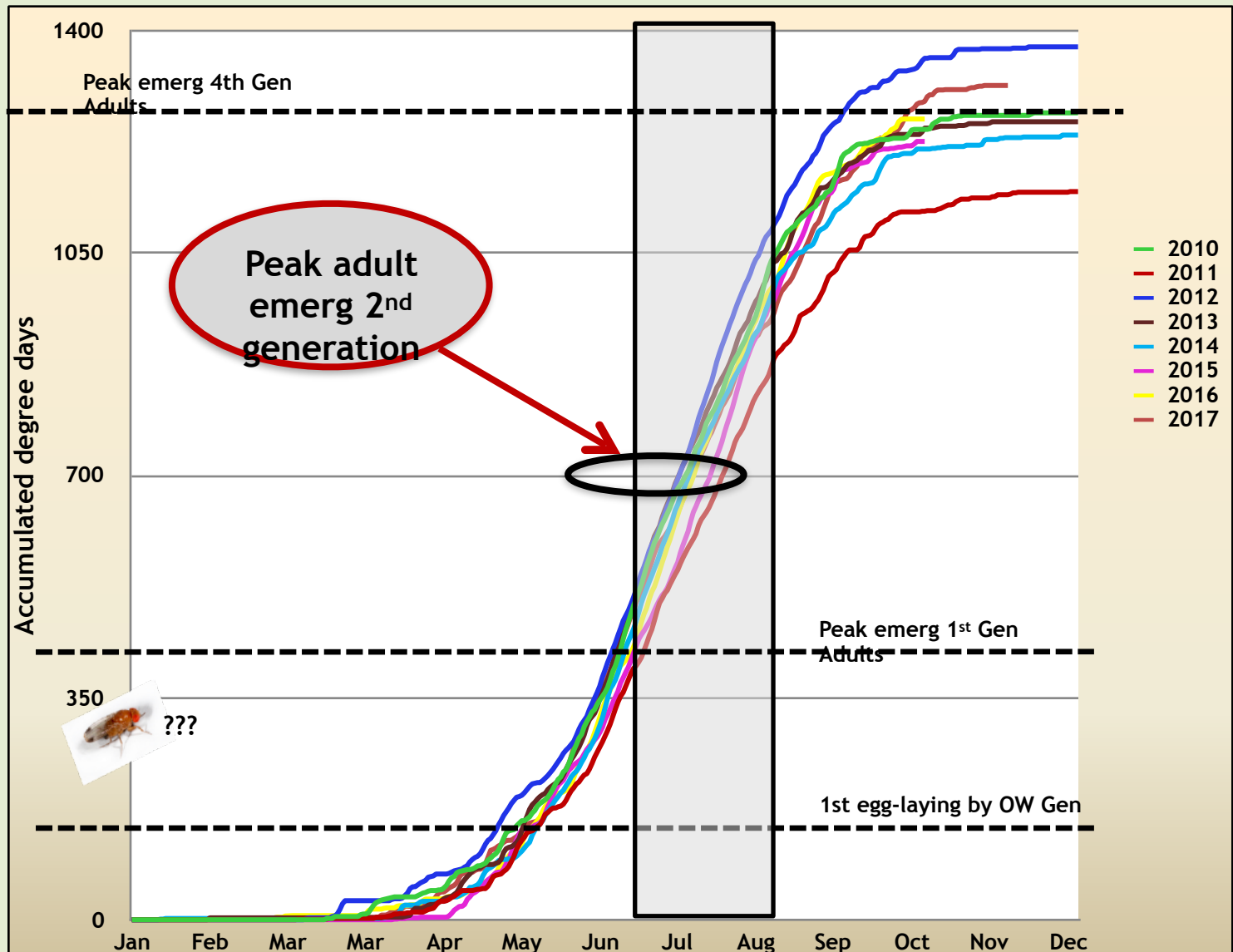


Results - 2017

2017 Average weekly SWD counts		
Month	Avg. SWD / Trap (min.)	Avg. SWD / Trap Max.)
July	0.7	1.78
August	2.43	22.85
September	23.5	180.25

- 1st detection June 30th
- Higher counts outside of crop
- Captures in crops are positively correlated with post-harvest
- Counts within the crop drop dramatically post-harvest
- Fruit infestations observed

SWD Phenology



Management - Canopy monitoring

MONITORING IS KEY!

- Trap from fruit set through harvest
- Expect 1st counts in border traps
- No economic threshold
- Test fruit
- Manage crop

Remember....

- Regularly check drip lines to look for leaks
- Prune, trellis or manage the crop canopy to improve harvest efficiency and spray coverage.

Management - Testing fruit

Saturated solution:

0.7kg sugar/4 L water OR 0.25kg salt/4 L water

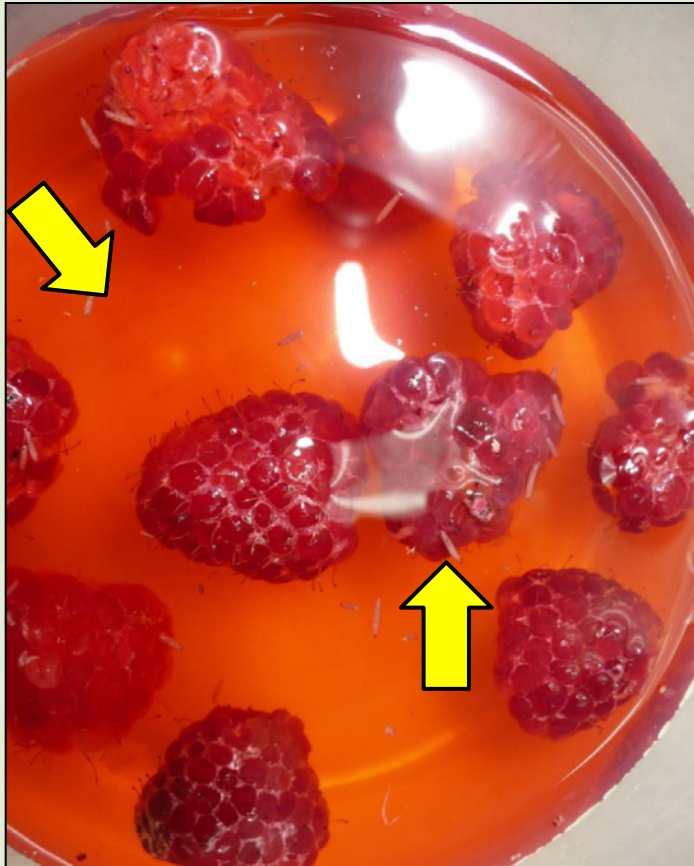


Photo credit: blueberries from Chris Maund,
NBDAA

Management - Wild Hosts

- SWD reared from many wild hosts
 - Honeysuckle*, brambles, pin cherry, dogwood
- Crops adjacent to wild hosts are at highest risk for early damage.
- Keep field edges tidy and free from brambles
 - Prune / hedge bramble to below the fruiting zone
- Do not apply insecticides to non-crop areas.

Management - Timing of Harvest

- Shorten picking intervals where possible.
- Harvest raspberries / blackberries every 2nd day
- Pick your crop early, clean and often.
- Freezing

Keep fresh market berries cold!
Blueberries held at ~2C for 3 days = 100%
mortality

Management - Culls

- Bury culls in sand
 - Daily
 - Minimum depth 30cm (12 inches)
- Solarize fruit
 - Cover with plastic (clear or black)
 - Ensure edges are sealed
 - Expose to sun
- Composting not effective





Many thanks to...

Susan Carbyn, AAFC-KRDC

Deb Oxby, AAFC-KRDC

Erika Bent, APM

Katherine Benedict, Cavendish-Agri
Services

Jen Haverstock

Peter Burgess

Sarah Scott

Brianne Saunders

Dylan Wyles

Matt Peill

Commercial Growers

