How to Optimize Your Time Management

Advisable to have some kind of flow chart prepared ahead of time for the different tasks throughout the season
- when to deploy traps for different species?
- what are the optimal times for taking samples?
- when do treatment decisions need to be made?
- when do mating disruption efforts need to be in place?
- when to be on the lookout for the breakout (secondary) pest species:
  - San Jose scale (NEWA Apple Pest Model)
  - green aphids, woolly apple aphids, leafhoppers, Japanese beetle, BMSB, etc. (TF Guidelines – “Additional Summer Sprays”)

Necessary to be familiar with the relative timing of pest activity
How does insect control articulate with disease control needs?
Typical windows for management:

- **European Red Mite**: delayed dormant (eggs); mixed motile stages (summer months)
- **Oriental Fruit Moth**: late pink to bloom (adult monitoring); petal fall, July & August (larvae); 3rd brood not always a problem
- **Obliquebanded Leafroller**: late bloom to petal fall (OW larvae); late June thru July (1st summer larvae); 2nd summer larvae not always a problem
- **Plum Curculio**: late bloom through 4-6 weeks past petal fall (adults)
- **Codling Moth**: late bloom to petal fall (adult monitoring); June and late July to mid-August (larvae)
- **Apple Maggot**: mid-July through August (adult monitoring)
## Trap Deployment/Sampling Timings

<table>
<thead>
<tr>
<th>Pest</th>
<th>Trap set out date / Sample timing</th>
<th>Lure change</th>
<th>Trap take down date</th>
<th>Trap type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oriental Fruit Moth</td>
<td>15 April (HVal: 1 April)</td>
<td>1 July</td>
<td>15 September</td>
<td>Large plastic delta</td>
</tr>
<tr>
<td>Codling Moth</td>
<td>1 May</td>
<td>1 July</td>
<td>15 September</td>
<td>Large plastic delta</td>
</tr>
<tr>
<td>Obliquebanded Leafroller</td>
<td>1 June</td>
<td>N/A</td>
<td>15 September</td>
<td>Large plastic delta OR Pherocon IIB</td>
</tr>
<tr>
<td>European Red Mite</td>
<td>June 1-30; July 1-30; Aug 1-15</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>San Jose Scale</td>
<td>25 May</td>
<td>N/A</td>
<td>1 September</td>
<td>Tent</td>
</tr>
<tr>
<td>Apple Maggot</td>
<td>20 June</td>
<td>N/A</td>
<td>1 September</td>
<td>Volatile-baited sphere</td>
</tr>
</tbody>
</table>
Fire blight Management Overview

- Prune out cankers
- Copper
- PhCa Pre-Bloom
- SARs
- Antibiotics & Biologicals
- PhCa petal fall +2 weeks

Apple Growth
Urea in fall or spring

Copper

Proteant fungicides

Single-site fungicides

Apple Growth

Apple Scab & powdery mildew, & other fungal diseases

Biologicals