



Stone Fruit IPM for Beginners

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Chapter 3

Scouting Calendars







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Use scouting calendars for better management decisions







Scouting to monitor for pests that may cause damage to fruit crops is a key component for making management decisions and using online tools supporting IPM. Scouts use a number of tools to track pests, many of which were noted in Chapter 2.

A scouting calendar can assist scouts by helping them predict when particular pests and which life stage of pests will be present in orchards during the season. These calendars and scouting reports can be used to decide which action to take (if any) to prevent damage. Not all pests listed in the calendars will be problematic in all sites, nor is this list an all-inclusive list of stone fruit pests.


Cherry and plum scouting calendar

| Growth stage and approximate dates | Pest actions |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Dormant (December – March)</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Sweet cherry</p>  </div> <div style="text-align: center;"> <p>Tart cherry</p>  </div> <div style="text-align: center;"> <p>Plum</p>  </div> </div> | <ul style="list-style-type: none"> ▶ Prune out cankers caused by bacterial canker when trees are dormant. Delay pruning to March for young trees and older trees that are weak. Copper-based materials may be applied before trees break dormancy. ▶ Black knot (plums): Prune out and burn all knots, cutting at least 6-8 inches below visible swellings. ▶ Mites and scale insects: Apply dormant oil to smother overwintering life stages of these pests. |
| <p>Swollen bud (mid-late April)</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Sweet cherry</p>  </div> <div style="text-align: center;"> <p>Tart cherry</p>  </div> <div style="text-align: center;"> <p>Plum</p>  </div> </div> | <ul style="list-style-type: none"> ▶ Prune out cankers caused by bacterial canker during periods of dry weather. Apply reduced rates of copper to avoid phytotoxicity. ▶ Scout for and apply insecticide as needed for aphids and climbing cutworms. ▶ Dormant oil may still be applied for mites and scale insects to smother overwintering life stages of these pests. <i>Note: When green or bloom tissue are present, be careful with chemistries that may be phytotoxic.</i> |




Cherry and plum scouting calendar

| Growth stage and approximate dates | Pest actions |
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| <p>Bud burst/green tip (late April)</p> <div style="display: flex; justify-content: space-around; text-align: center;"> <div data-bbox="99 262 332 682"> <p>Sweet cherry</p>  </div> <div data-bbox="332 262 565 682"> <p>Tart cherry</p>  </div> <div data-bbox="565 262 808 682"> <p>Plum</p>  </div> </div> | <ul style="list-style-type: none"> ▶ Deploy monitoring traps for insect pests. ▶ In plums, apply fungicide against black knot. |
| <p>White bud/popcorn (early May)*</p> <p>*Sweet cherry is pictured. Phenology is similar for sweet cherry, tart cherry and plum.</p>  | <ul style="list-style-type: none"> ▶ Apply fungicide for brown rot especially for sweet cherry. ▶ Scout for green fruitworm and consider insecticide application if populations are high. |
| <p>Bloom (mid-May)*</p> <p>*Sweet cherry is pictured. Phenology is similar for sweet cherry, tart cherry and plum.</p>  | <ul style="list-style-type: none"> ▶ Apply fungicide for brown rot (cherry and plum), cherry leaf spot (cherry) and black knot (plum) prior to possible infection periods or if wet, rainy weather prevails. ▶ Frost/freeze, cold and wet weather favors bacterial canker (sweet cherry). A copper spray may be warranted in these conditions. |
| <p>Petal fall (mid- to late May)*</p> <p>*Sweet cherry is pictured. Phenology is similar for sweet cherry, tart cherry and plum.</p>  | <ul style="list-style-type: none"> ▶ Apply fungicide for brown rot (cherry and plums), leaf spot (cherry and plums) and black knot (plums) prior to possible infection periods. ▶ Scout for and apply insecticide as needed for plum curculio, mites, aphids, green fruitworms (cherry), leafrollers, American plum borers, oriental fruit moth (plums) (if not using mating disruption), leafhoppers and San Jose scale. |




Cherry and plum scouting calendar

| Growth stage and approximate dates | Pest actions |
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| <p>Shuck split/fall (late May)* *Sweet cherry is pictured. Phenology is similar for sweet cherry, tart cherry and plum.</p>  | <ul style="list-style-type: none"> ▶ Apply fungicide for brown rot (cherry and plums), leaf spot (cherry and plums) and black knot (plums) prior to possible infection periods. ▶ Scout for and apply insecticide as needed for plum curculio (cherry and plum), leafrollers (sweet and tart cherry) and black cherry aphids (sweet cherry). |
| <p>First cover (early to mid-June)</p> | <ul style="list-style-type: none"> ▶ Apply a fungicide or combination of fungicides effective against brown rot, cherry leaf spot (prior to possible infection periods) and black knot (plum) or powdery mildew (cherry). ▶ Scout for and apply insecticide as needed for black cherry aphids (sweet cherry), plum curculio, leafrollers, peachtree borers, rose chafers and San Jose scale. |
| <p>Second cover (mid- to late June)</p> | <ul style="list-style-type: none"> ▶ Apply fungicide or combination of fungicides effective against cherry leaf spot and brown rot prior to possible infection periods. ▶ Scout for and apply insecticide as needed for black cherry aphids (sweet cherry), leafrollers, rose chafers and peachtree borers. ▶ For sweet and tart cherry, if any spotted wing Drosophila have been caught in traps and fruit are at the straw color stage, use an insecticide or combination of insecticides to target this pest as well. |
| <p>Third cover (early July) to pre-harvest (mid-July – early August)</p> | <ul style="list-style-type: none"> ▶ Apply fungicide or combination of fungicides effective against cherry leaf spot and brown rot prior to possible infection periods. ▶ Scout for and apply insecticide as needed for apple maggots/ cherry fruit flies, leafrollers, rose chafers, mites, Japanese beetles, leafhoppers, aphids and scale insects. ▶ In sweet and tart cherry, use an insecticide that is effective against spotted wing Drosophila. To prevent infestation by this pest in plum, harvest fruit before it softens to 3.5 pounds firmness, as measured with a penetrometer fitted with a 7.9 millimeter tip. |
| <p>Post-harvest (mid-August)</p> | <ul style="list-style-type: none"> ▶ A fungicide for cherry leaf spot may be needed at this timing if the season has been particularly wet and conducive for cherry leaf spot development (tart cherry). |


Peach and nectarine scouting calendar

| Growth stage and approximate dates | Pest actions |
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| <p>Dormant (December – February)</p>  | <ul style="list-style-type: none"> ▶ Valsa canker is assisted by cold injury when it infects trees. Cultural practices to harden off trees by fall are important in reducing cold injury. These include late spring pruning, avoiding excess fertility and planting an early cover crop (by July 4) in clean, cultivated orchards. ▶ Sprays to prevent peach leaf curl and bacterial spot are applied in autumn after leaf drop or in spring before bud swell. |
| <p>Delayed dormant (March – April)</p> | <ul style="list-style-type: none"> ▶ For varieties not resistant to bacterial spot, follow the season-long recommendations in E-154; in high pressure years (e.g., seasons with extended wet periods that induce water congestion in leaves) and on sandy sites, this disease will be very hard to control on susceptible varieties. ▶ Dormant oil application is used to smother the overwintering life stages of San Jose scale insects. ▶ Scout for and apply an insecticide as needed for climbing cutworms. |
| <p>Swollen bud (mid- to late April)</p>  | <ul style="list-style-type: none"> ▶ Continue maintenance sprays for bacterial spot in susceptible cultivars. ▶ X-disease prevention begins with scouting and removing chokecherry bushes within a 500-foot radius of a stone fruit orchard. April is a good timing to do this because chokecherry bushes are easier to spot when they are in bloom. ▶ It is still safe to apply dormant oils for mites and scale insects. <i>Note: Do not apply chemistries that may be phytotoxic when flower buds and green leaf tissue are present.</i> |
| <p>Pink (late April to early May)</p>  | <ul style="list-style-type: none"> ▶ Prune out dead wood and cankers caused by valsa canker when trees are at the pink stage or later to allow rapid healing. When removing entire limbs, leave a stub that is between 0.25 and 0.5 inch. Remove cuttings from orchard and burn as soon as possible. ▶ This is also the time to start culling trees with symptoms of x-disease. Burn the trees after removal. ▶ Continue maintenance sprays for bacterial spot in susceptible cultivars. ▶ Consider fungicide application for American brown rot. ▶ For green fruitworm and tarnished plant bug, consider insecticide application if populations are high. ▶ Deploy pheromone dispensers for oriental fruit moth mating disruption. |

Peach and nectarine scouting calendar

| Growth stage and approximate dates | Pest actions |
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| <p>Bloom (mid-May)</p>  | <ul style="list-style-type: none"> ▶ Continue maintenance sprays for bacterial spot in susceptible cultivars. ▶ Apply fungicide for American brown rot. ▶ Apply fungicide for powdery mildew or rusty spot if growing a susceptible cultivar. |
| <p>Petal fall (mid- to late May)</p>  | <ul style="list-style-type: none"> ▶ Continue maintenance sprays for bacterial spot in susceptible cultivars. ▶ Apply fungicide for American brown rot and rusty spot if growing a susceptible cultivar. ▶ Apply insecticide for oriental fruit moth if not using a mating disruption. ▶ Scout for and apply insecticide as needed for rose chafers, tarnished plant bugs, green peach aphids, thrips, leaf-rollers and San Jose scale. |
| <p>Shuck split/fall (late May)</p>  | <ul style="list-style-type: none"> ▶ Continue maintenance sprays for bacterial spot in susceptible cultivars. Avoid using copper-based materials at and after shuck-split to prevent phytotoxicity injury. ▶ Apply fungicide for American brown rot, rusty spot and peach scab. ▶ Apply insecticide as needed for plum curculio, oriental fruit moth (if not using mating disruption), rose chafer, San Jose scale, lecanium scale and tarnished plant bug. San Jose scale crawler stage is approximately seven to 10 days after shuck split. |

Peach and nectarine scouting calendar

| Growth stage and approximate dates | Pest actions |
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| First cover (early- to mid-June)  | <ul style="list-style-type: none"> ▶ Continue maintenance sprays for bacterial spot in susceptible cultivars. ▶ Scout for and cull trees with symptoms of x-disease. ▶ Apply a fungicide or combination of fungicides active against American brown rot, peach scab, and powdery mildew or rusty spot (if growing a susceptible cultivar). ▶ Apply insecticides as needed for oriental fruit moth (if not using mating disruption), tarnished plant bugs and rose chafers. |
| Second cover (mid- to late June) | <ul style="list-style-type: none"> ▶ Continue maintenance sprays for bacterial spot in susceptible cultivars. ▶ Apply a fungicide or combination of fungicides active against peach scab and powdery mildew or rusty spot. ▶ Apply insecticide as needed for oriental fruit moth (if not using mating disruption) and lesser peachtree borer. |
| Third cover (early July) to pre-harvest (mid-July – early August) | <ul style="list-style-type: none"> ▶ Valsa canker requires cold injury to infect trees. In clean-cultivated orchards, sow a cover crop around July 4 to help prevent cold injury later. ▶ Continue maintenance sprays for bacterial spot in susceptible cultivars up until three weeks prior to harvest. ▶ Apply a fungicide or combination of fungicides active against American brown rot and peach scab. ▶ Apply insecticide as needed for oriental fruit moth (if not using mating disruption), lecanium scale, peachtree borers, twospotted spider mites, Japanese beetles, thrips, leafrollers, tarnished plant bugs and brown marmorated stink bugs. |
| Post-harvest (mid-August) | <ul style="list-style-type: none"> ▶ Scout for and cull trees with symptoms of x-disease. |