



Varroa & Beekeeping — Quick Reference

The Alleman Apiary · Harrisburg, PA · hive-sim companion



MONITOR — know your mite load

- Test ~300 bees by alcohol wash (most accurate) or sugar roll. Check MONTHLY, spring through fall.
- TREAT when mites exceed ~2 per 100 bees (2%), year-round (Honey Bee Health Coalition, 9th ed.).
- The number that matters most: knock mites DOWN before the Aug–Sep peak — high August mites kill the winter bees, so a honey-heavy colony can still die over winter. Re-test ~2 weeks after treating.

MITE TREATMENTS (rotate modes of action — don't use the same one every time)

Product (active)	Temp	Supers	With brood?	~Kill	Key notes
Apivar (amitraz)	wide	OFF	yes	~95%	Strips 42–56 d. Rotate — resistance now appearing.
Formic Pro/MAQS (formic)	50–85°F	ON ok	yes — kills under cappings	61–98%	Pads ~7–14 d. The only one that reaches sealed mites. Too hot harms queen/brood.
Apiguard (thymol)	60–105°F	OFF	yes	74–95%	Gel tray, two 14-d doses. Needs warmth to vaporize.
Oxalic acid dribble/vapor	any*	OFF	no — broodless	82–99%	Best broodless (late fall/winter). Very cheap. *risky opening below 40°F.
VarroXSan (ext. oxalic)	any	ON ok	yes	92–98%	Slow-release strips 42–56 d. No temp limit, supers can stay on.
HopGuard 3 (hops)	55–100°F	ON ok	no — adults	75–95%	No known resistance; quick adult-mite knockdown.
Norroa (RNAi, vadesca)	any	OFF	yes — needs brood	~18 wk ctrl	Syrup pouches; blocks mite reproduction for months. Bee/queen-safe. Apply when mites are low.
Drone-brood removal	—	ON	—	partial	Chemical-free: cut out mite-rich capped drone comb. Pair with other methods.
Apistan (fluvalinate)	—	OFF	—	avoid	NOT recommended — widespread resistance + contaminates wax for years.

WINTER-READY CHECK (by Oct 1)

- ☐ 70–90 lb (32–41 kg) honey stores
- ☐ Aug–Sep mites controlled (protects winter bees)
- ☐ Healthy, young, laying queen
- ☐ Mouse guard + entrance reducer on
- ☐ Upper entrance / ventilation for moisture
- ☐ All treatments removed & stored

FEEDING

1:1 syrup (spring)

Thin — stimulates brood rearing & comb building. Warm weather only.

2:1 syrup (fall)

Thick — packs on winter stores. Feed until too cold to take.

Fondant / dry sugar

Solid winter emergency food — works in the cold when bees won't take syrup.

Pollen patty

Protein for brood when little is coming in. Don't overdo early (also feeds mites).

HIVE LOG (write on the lamination with a wet-erase or grease pencil)

Date	Mite wash (/100)	Treatment / action taken	Done



Beekeeper's Calendar — Northeast

Month-by-month · The Alleman Apiary · hive-sim companion



Mo	What's happening	Key tasks
JAN Deep winter	Cluster tight; cleansing flights on 50°F+ days.	Don't open — heft for weight; dry sugar/fondant if light. ORDER bees/queens now. Repair gear.
FEB Late winter	Queen starts laying; starvation risk rising.	Feed dry sugar/candy if light. Some add pollen patties. Finish equipment prep.
MAR Early spring	Lowest population of the year. HIGH starvation risk.	Most starvation happens NOW — keep feeding; want 3–4 combs of honey. Mites low: don't treat yet.
APR Spring	Pollen/nectar on warm days; drones begin.	START monthly mite monitoring (treat 2+/100) — ideal supers-off window. Check for AFB. Requeen poor colonies.
MAY Swarm season	Brood in high gear; swarm season begins mid-May.	Inspect every 2 wks; swarm control (room/supers/splits). Monitor mites. Best month to rear queens.
JUN Peak season	Peak population; mites still building.	Continue swarm control & queen rearing. Monitor mites. Supers on during the flow; extract promptly.
JUL Summer	Swarm season winds down; possible dearth.	Watch for robbing in a dearth; water if hot. Last chance to split. Harvest as supers fill.
AUG Late summer	Winter-bee rearing starts; mites usually PEAK.	CRITICAL varroa window — treat NOW to protect winter bees. Aim 70–90 lb; feed 2:1 if light.
SEP Early fall	Last month to get winter-ready; first frost.	Finish treatment once supers are off. Ensure 70–90+ lb stores; feed heavy 2:1 if light.
OCT Winterize	Little laying; cluster forms ~50°F; drones evicted.	Final mite check, then REMOVE all treatments. Mouse guard + entrance reducer. Manage moisture (upper entrance, tilt forward).
NOV Early winter	Cluster set; little/no laying.	Finish winterizing; keep an upper entrance. Store comb (wax moths). Mostly hands-off.
DEC Deep winter	Quiet month.	Leave the cluster alone; check covers after storms. Heft on a mild day. Plan next year; order early.