

Hive Management Techniques

Hive Management Techniques

Key practices for maintaining healthy, productive colonies

1. Seasonal Overview

Season	Primary Goals	Typical Tasks
Spring	Build up population, store honey, prevent swarming	- Inspect brood frames - Add supers - Provide protein (pollen patties) - Monitor for queen health
Summer	Maximize honey flow, control pests, avoid overheating	- Rotate supers - Ventilation adjustments - Check for varroa & wax moths - Harvest honey
Fall	Prepare for winter, reduce hive size, ensure food stores	- Remove excess supers - Feed sugar syrup or candy boards - Reduce entrance size - Treat for varroa if needed
Winter	Keep colony alive through cold, minimize moisture	- Insulate hive (blankets, wood shims) - Ensure adequate food (2-5kg honey) - Check for condensation, ventilate slightly

2. Hive Inspection Routine

Step	What to Look For	Action
Entrance	Traffic flow, dead bees, robbing signs	Clear debris, add guard if needed
Frames	Brood pattern, queen presence, honey/pollen stores	Re-space frames, replace damaged comb, add queen if absent

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Step	What to Look For	Action
Varroa Checks	Mite drop on sticky board, mite? drop count	Apply treatment (oxalic acid, formic acid, thymol) if >3% infestation
Ventilation	Airflow, condensation	Adjust entrance reducer, add upper ventilation holes
Disease	Chalkbrood, American foulbrood, Nosema spores	Remove infected frames, sterilize tools, consider antibiotic/organic acid treatment

Frequency:

- **Spring/Summer** – every 7-10 days during strong nectar flow.
- **Fall** – every 2-3 weeks.
- **Winter** – only if needed (e.g., after a warm spell).

3. Swarm Prevention & Control

Technique	How It Works	When to Apply
Space Management	Adding supers gives bees room to store honey, reducing crowding	Early spring, before queen starts laying heavily
Queen Excluder	Keeps the queen in brood area, forces foragers to use lower boxes	Mid-spring, after brood is well established
Split Colonies	Removing a portion of the colony with a queen or queen cell creates a new hive, relieving pressure	When brood pattern shows “crowding” or after a strong nectar flow
Requeen	Replacing an older queen with a young, vigorous one reduces supersedure impulses	Every 1–2 years or if queen performance declines
Comb Management	Rotate old comb out, replace with fresh foundation to reduce pheromone buildup	Annually, during fall or early spring

4. Pest & Disease Management

Pest/Disease	Monitoring Method	Treatment Options (organic first)
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- Oxalic acid (sublimation or dribble)

Varroa destructor Sticky board, sugar roll, alcohol wash • Formic acid (MAQS, Formic Pro)

- Thymol strips

Small hive beetle Beetle traps, visual inspection

- Diatomaceous earth in bottom board

- Beetle traps with