



Right-Sizing Your Mower Fleet

3,000 annual acres divided by one mower's real annual capacity comes out to 2.34 mowers. There is no such thing as a third of a mower, and rounding the wrong direction either strands work or buys equipment that sits idle.

Fleet sizing always ends the same way: a workload number divided by a per-unit capacity number, producing a result that is almost never a whole number. What happens next, rounding up or down, is the whole decision, and it is easy to get backwards without walking through what each direction actually costs.

A worked example: 2.34 mowers is not a real answer

A 42-inch riding mower on open terrain, run 30 hours a week for a 35-week season, covers 1,050 annual hours at an effective 1.22 acres per hour, 1,282.9 acres of annual capacity. Against 3,000 total annual acres of workload, that is 3,000 divided by 1,282.9, 2.34 mowers. There is no 0.34 of a mower to buy, the real answer has to round to a whole number, and which direction it rounds changes everything downstream.

Why the fleet always rounds up, not down

Rounding down to 2 mowers leaves the fleet able to cover only 2,565.8 of the 3,000 required acres, a real 434.2-acre shortfall that shows up as missed mowing windows, late service, or subcontracted overflow work eating into margin. Rounding up to 3 mowers gives 3,848.7 acres of total capacity against 3,000 acres of workload, real spare capacity, not a shortfall. The fleet-sizing engine rounds up for exactly this reason, capacity has to meet or exceed the workload, not average out to roughly enough.

What the spare capacity from rounding up is actually worth

The gap between 3,848.7 acres of capacity and 3,000 acres of workload, 848.7 acres, is not wasted, it is the buffer that absorbs a rained-out week, a mower down for repair, or a new property added mid-season without immediately forcing another fleet decision. Treating that spare capacity as pure waste, and trying to shave the fleet back down to exactly cover today's workload, removes the slack that keeps a route running when conditions are not perfect.

Hauling capacity has to scale with the fleet, not just the mowers

Adding a third mower does not just add mowing capacity, it usually adds a hauling and transport requirement too. Trailer Fleet Economics prices that separately, weekly hauling cost from miles per trip and trips per week, a cost that scales with how the larger fleet actually gets moved between properties, not just with the mower count itself.

Key takeaway. Fleet sizing rounds up, not down. A capacity shortfall costs missed service and overflow subcontracting, while the spare capacity from rounding up is a real operating buffer, not waste.

Assumptions

- The worked example uses a 42-inch riding mower on open terrain, 30 weekly hours run, and a 35-week operating season, all illustrative round numbers.

Frequently asked questions

Is there a point where rounding up stops making sense?

When the fractional remainder is very small (2.05 mowers, for instance), the spare capacity from rounding up to 3 can be large relative to the shortfall from staying at 2, worth checking whether renting or subcontracting the small overflow is cheaper than the full cost of an additional mower for that season.

Does terrain or deck width change the fleet count meaningfully?

Yes, both feed directly into the effective acres-per-hour figure, a wider deck or more open terrain raises per-mower capacity and can turn a 3-mower requirement into a 2-mower one, worth checking before assuming the fleet needs to grow.

How does this interact with the property capacity engines?

Total annual acres is a workload input here, sourced from whatever properties the business is servicing or planning to service. Property Profitability Ranking and Weekly Route Capacity answer whether taking on more properties is worth it in the first place, this guide answers what fleet that resulting workload requires once the properties are committed.

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