## Raised beds

Plastic mulch without raised beds can be a good way to start, particularly with a small field that drains well. Otherwise, raised beds provide consistent moisture control across the field and across different soil types. With some crops on beds without plastic mulch, the furrows between beds are an excellent guidance system for row crop cultivation.



About 35 PTO HP is typical to form beds 6" high. 4WD is raging popular these days and one way to maximize traction, but 2WD tractors have just as much power and traction when properly weighted.

As mentioned earlier with tractor power, don't pass by the old knowledge of adding front and rear tractor ballast.



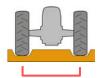
Keep in mind 4WD tractors are heavier in front with the extra front drive train. Front end loaders also add weight for traction.

If closer to 25 PTO HP is available, a 4" or 5" bed height may be more appropriate. Bed height is easily changeable.

Then again...raised beds can be formed in two passes, which many operators prefer as it simplifies bed layout (spacing, straight rows) and bed finishing (filled, firmed, level), and enables use of less HP for 6" beds or even 8" beds. But note that higher beds are not necessarily better considering deeper tillage requirements that may be contrary to proper soil management. Underbelly clearance on compact tractors may also be limited. The average 5-ft roto-tiller is good for 6" beds - not higher. Measure roto-tiller depth against the untilled ground in front of it, not the fluffy soil coming out the back. It quickly settles!

Bed top can be as wide as the space between tractor wheels or a couple inches less. A  $36" \times 5"$  bed (bed top x bed height) is ideal for crops without mulch like sweet corn, green beans, onions and carrots. Use the same bed width to apply 48" mulch with a separate mulch layer, which results in a 30" mulch top, for crops like tomatoes, melons, peppers and lettuce. Adjust bed top to 34" for 6" bed height or 38" for 4" bed height. Add 6" to bed top or mulch top with 54" mulch.

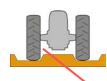
Yes, with a separate bed shaper and mulch layer, start with a wider bed top, shaving (approx) 3" off each side of the bed. This is the covering soil needed to hold down mulch edges. When applying mulch, don't start with a bed too narrow then where does the covering soil come from? Mulch edges can be buried deeper in the bed furrows, but this a big-farm technique that requires wider mulch and deeper loose soil - and several changes in equipment that's often beyond small-farm, small-tractor capabilities.



Wheels are intended to align with raised bed furrows

Wider furrows are possible for wider walking paths. Ideally, wheel spacing still matches bed spacing





Wheels can be narrower for a narrower bed top but beauty of the resulting furrows is in the eye of the beholder



Wheel spacing too narrow or bed tops too wide present several problems