

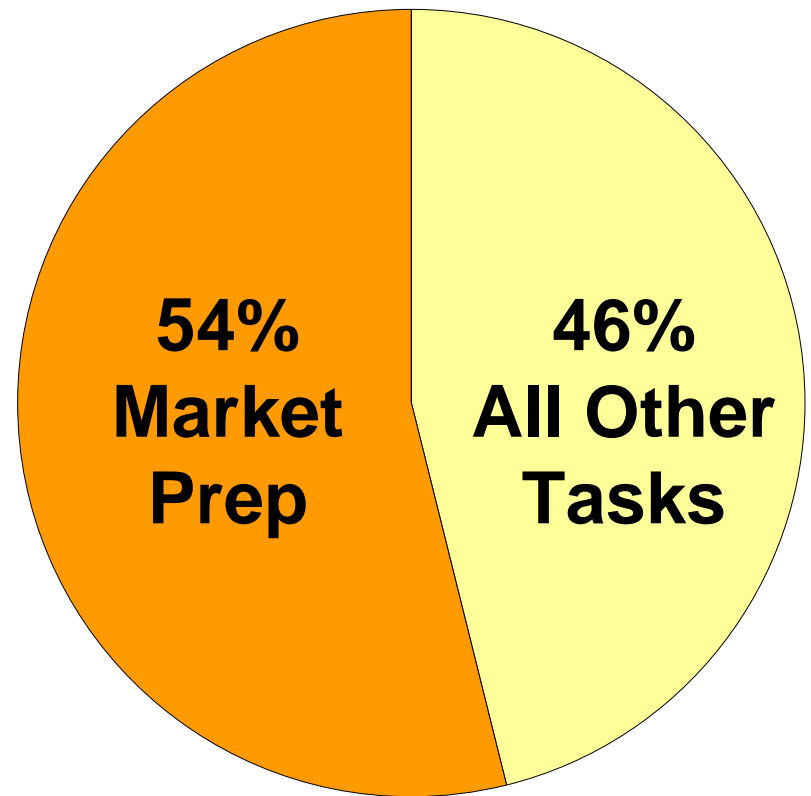
Burley Market Preparation Efficiencies

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**For a 6800 plant acre of
burley,
54% of the
total labor
requirement
is for
market preparation**

Labor Requirements



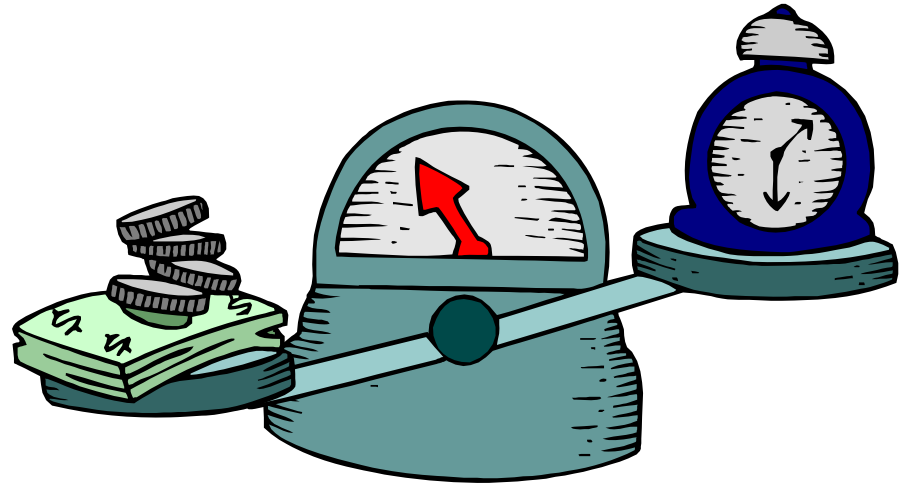
**Labor Saving,
Cost Lowering
Market Prep
Tips**

I. Take Advantage of Time in Order/Case

- **Time in order one of most limiting factors in efficient market prep**
- **Be ready to take down as much as you can store**
- **Bulked down storage limited by spoilage possibility**
- **Scaffold wagons excellent, but need an adequate casing/ ordering room**

II. Burley Tobacco taken down in low case and bulked on the stick is less likely to heat.

Quality and weight are more easily maintained while capturing labor efficiencies



III. Have a Casing Room

- **Enclosed area with humidifiers and heat**
- **Sized to case enough tobacco overnight to keep crew working a full day or more**
- **Bring in stored tobacco in evening**
- **Ready to go next morning**
- **“Just in time” continuous process**
- **Limiting factor: How much tobacco can you take down and store??**

IV. Manually handle as little weight and bulk as possible for as few times as possible

That is

Mechanically handle as much weight as possible in bulk on pallets, in bins, on scaffold trailers, wagons, etc., for as few times as practical.

Applies to bulked down tobacco, sticks, stalks, tobacco stored for baling, bales, etc.

V. Tasks other than stripping have a big effect on market prep efficiency

- **Takedown, storage, transport to stripping area, baling, getting rid of stalks, removing and storing sticks, moving and storing bales all take labor**
- **Inefficiencies in these areas can cost as much as inefficiencies in stripping itself.**

Economic Efficiency

Based on 3 Farm Grades & Throw-out

	Conventional or Relay	Wheel	Carousel	In-line Conveyor
Sticks/labor hr (stripping only)	31.2	33.6	33.3	33.0
Labor hrs/A (stripping only)	36.3	33.8	34.0	34.3
Labor hrs/A (all prep tasks)	43.9	42.6	46.5	46.0
\$ New Cost	\$0	\$800+	\$50	\$1250
Min-max Crew	1 to 7	3 to 7	1 to 7	3 to 5

VI. Market preparation tasks are ideal for an assembly-line systems approach . . . Think of it as a factory process with or without mechanization (motors, etc.)



Big Bales

Big Bales – Farmer Advantages

- **Less labor**
 - **Tangled leaf, no orientation**
 - **May make stripping aids more effective**
 - **Less time baling**
 - **Fewer bales to handle**
 - **Mechanized handling**
- **Known bale weight**

Farmer Disadvantages

- **Cost of baler and handling equipment**
- **Modification to stripping facility**
 - **Smooth floor**
 - **Room for bale handling equipment**
 - **Room for storage of stripped tobacco**
- **Conversion cost ~ 8 to 12 thousand**
- **Moisture – No Tolerance**

Labor Savings

- **Most farmers who have switched are pleased**
- **Indicate 20 to 30 % saving**
 - **Dependent on efficient organization**
 - **Stripping aids may be more effective**
- **UT research indicates 15 %**
- **For typical yield of 2200 lbs/ac, saving of 5 to 7 cents per pound**

Big Bales – Who should switch?

- **Tradeoff between cost of adoption and labor saved**
- **Initial cost may be \$10,000 + for baler, facility modification, other equipment**
- **Annual cost in \$1500 range**
- **More beneficial with larger production**
- **Switching point 20 to 30 thousand pounds ?????**
- **Current research should give better idea**