















Solar Charger Setup











John Deere 9670 Combine

- Machine Weight = 32,660 lb
- Rear Tires 750/65R26 (2) Plate (inches sq.) 467
- Front Tires 520/85R42 (4) Plate (inches sq.) 440
- 250 Bu. Grain tank x 60 lbs/bu. = 15,000 lbs
- JD 630FD = 7,069 lbs
- Total Wt.= 54,729 lbs./2,694 sq. in. of plate = 20.32 lbs/sq. inch

John Deere 8130 Tractor

- Machine Weight 27,000 lbs
- Rear Tires 480/80R46 (4) Plate (inches sq.) 370
- Front Tires 420/90R30 (2) Plate (inches sq.) 240

J&M 1000 Grain Cart

- Cart Weight 14,078 lbs
- 1000 bu. X 60 lbs/bu. = 60,000 lbs
- Tires IF900/65R32CFO Plate (inches sq.) 643

Total Wt.= 101,078 lbs/3246 sq. in. plate = 31.14 lbs/sq. inch

The Golden Hoof

Sheep

- Sheep foot = 2"x1.5"
- 3" sq. x 4 feet = 12 sq. in.
- 125# ewe12 sq. in
- 10.42 lbs/sq. in.

Cattle

- Cow foot = 4"x4.5"
- 18" sq. x 4 feet = 72 sq. in.
- 1250# cow72 sq. in.
- 17.36 lbs/sq. in.



Residue Management

- Takes grass to grow grass
- Important to keep solar panel growing and collecting sunlight for as many days per year possible
- Important for C4 plants going into fall and C3 plants going into winter (root reserves)
- Adequate residue captures rain, reduces evaporation, maintains proper soil temperature
- Residue feeds to soil microbes which feed the grass
- Stockpile whole farm rather than portion of farm















Graze crop residues

- Graze corn stubble immediately after harvest before stalks deteriorate or winter mud arrives
- Single strand electric fence is easy and cheap to build and take down
- Can provide cheap feed for a couple months in the fall as grass grows for winter grazing
- Cover crops grown in the corn before harvest can provide a lot of feed







Proper Allocation

- Temporary fencing
 - Polywire and step-in posts
- Cows eat with 5 mouths
- Short graze breaks (1-3 days)
- Cheaper than starting a tractor and feeding hay

Flexible Stocking Rate

- Stock for winter carrying capacity
 - Smallest, resident herd/flock when feed supply is least
- Use others' animals to graze extra forage
- Custom grazing
- Carry calves over for spring lush





Feed Hay in September/October

- Allows grass to grow and stockpile for winter use
- Cows are not eating as much hay due to warm weather so less hay is required
- Nutrient requirements are not as high as in cold weather
- Higher quality stockpile available later when needed requiring less supplementation
- Feeding hay when the ground is firm and not muddy
- Pick a paddock that needs fertility and feed hay on it
- Gives CSG a chance to build root reserves before winter



Space bale feeding

- Place bales where you want to feed them on pasture in warm, dry weather
- Protect with polywire when grazing the paddock
- Place on single paddock or a few in different paddocks to reduce mud
- Unroll, use bale rings or just allocate a certain number of bales at a time
- Reduces starting tractor in cold weather and driving in muddy conditions



