

Grass-Cast
knows

Total
Production
Loss

not

Grazing
Loss

Average Year

- **1000** pounds per acre
- Leave $\frac{1}{2}$ → leave 500 lbs
- Take $\frac{1}{2}$, but half of that gets trampled, so you really get to take $\frac{1}{4}$ = **250 lbs**



Drought Year (30% less)

- **700** pounds per acre
- If still leave 500 lbs...
- 200 lbs left to take, but half gets trampled, so you really get **100 lbs**
- 100 lbs vs. 250 lbs =
- A **60% grazing loss**
- Which is >> than G-C's 30% total prod'c'n loss



Grass-Cast
knows

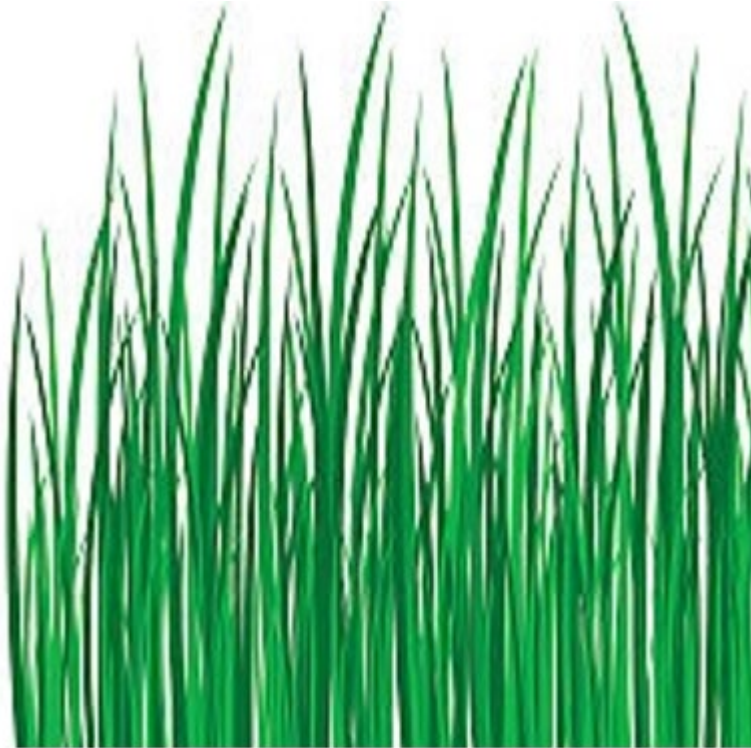
Total
Production
Loss

not

Grazing
Loss

Average Year

- **1000** pounds per acre
- Leave $\frac{1}{2}$ → leave 500 lbs
- Take $\frac{1}{2}$, but half of that gets trampled, so you really get to take $\frac{1}{4}$ = **250 lbs**



Drought Year (50% less)

- **500** pounds per acre
- If still leave 500 lbs...
- **0 lbs** left to take, so you really get **0 lbs**
- 0 lbs vs. 250 lbs =
- A **100% grazing loss**
- Which is >> than G-C's 50% total prod'c'n loss



Grass-Cast
knows

Total
Production
Loss

not

Grazing
Loss

Average Year

- **1000** pounds per acre
- Leave 400 lbs (*less than ½*)
- Take 600 lbs, but half of that gets trampled, so you really get to take **300 lbs**

Drought Year (15% less)

- **850** pounds per acre
- If still leave 400 lbs...
- **450 lbs** left to take, but half gets trampled, so you really get **225 lbs**
- 225 lbs vs. 300 lbs =
- A **25% grazing loss**
- Which is >> than G-C's **15%** total prod'c'n loss

Grazing loss, relative to G-C's estimate, depends on how much a rancher leaves for conservation. If they "leave nothing," then grazing loss = G-C estimate. If "leave half," then grazing loss = **twice** G-C estimate. If "leave something **less than half**," then grazing loss is something less than 2X the G-C estimate.



Grass-Cast

- *Estimates* total production
- Final forecast isn't ground-truthed in real time
- Likely UNDER-estimates grazing losses, *if* rancher "leaves some"
- Accuracy = 60 – 80%
 - Nearest NWS COOP station?
 - Data interpolated between
- Works better in some places than others