

PLASTIC BAG IMPACT IN VIRGINIA: IMPACT ON AGRICULTURE



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Plastic Bags – Agricultural Problem?



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How Do Plastic Bags Impact Agriculture?

⦿ Crops – Contamination

- Discounted prices due to contamination
- Cotton – poor fiber quality

⦿ Equipment –

- Damage
- Lower efficiency

⦿ Livestock –

- Ingestion
- Sickness or Death



Focus on Cotton: A Few Facts

- 80 countries produce cotton
 - 40% of total world fiber production
 - 2008 Acreage –
 - U.S. – 9,470,000 Acres
 - Virginia – 61,000 Acres
 - 2008 Production (480 lbs/Bale)
 - U.S. – 13,035,600 Bales
 - Virginia – 112,000 Bales
 - U.S. cotton industry accounts for more than \$25 billion annually
- One Bale of Cotton Produces:
 - 215 pairs of jeans
 - 249 bed sheets
 - 409 men's sport shirts
 - 690 terry bath Towels
 - 765 Men's Dress Shirts
 - 1,217 Men's T-Shirts
 - 1,256 Pillowcases
 - 2,104 Boxer Shorts
 - 2,419 Men's Briefs
 - 3,085 Diapers
 - 4,321 Mid-Calf Socks
 - 6,436 Women's Knit Briefs
 - 21,960 Handkerchiefs
 - 313,600 \$100 Bills



Cotton Contamination

- Costs international cotton industry more than \$200 million each year
- Contamination – any object/particle that's NOT cotton
 - Human and animal hair
 - Bird feathers
 - Wrappers
 - Cigarette Packs
 - Paper
 - Oil
 - Grease
 - Plastics – bags, twine, module/bale covers
- 55% of contamination complaints were plastic



Why Don't Farmers Pick them UP?



CAN YOU
PICK OUT
THE BAG?

What about
NOW?



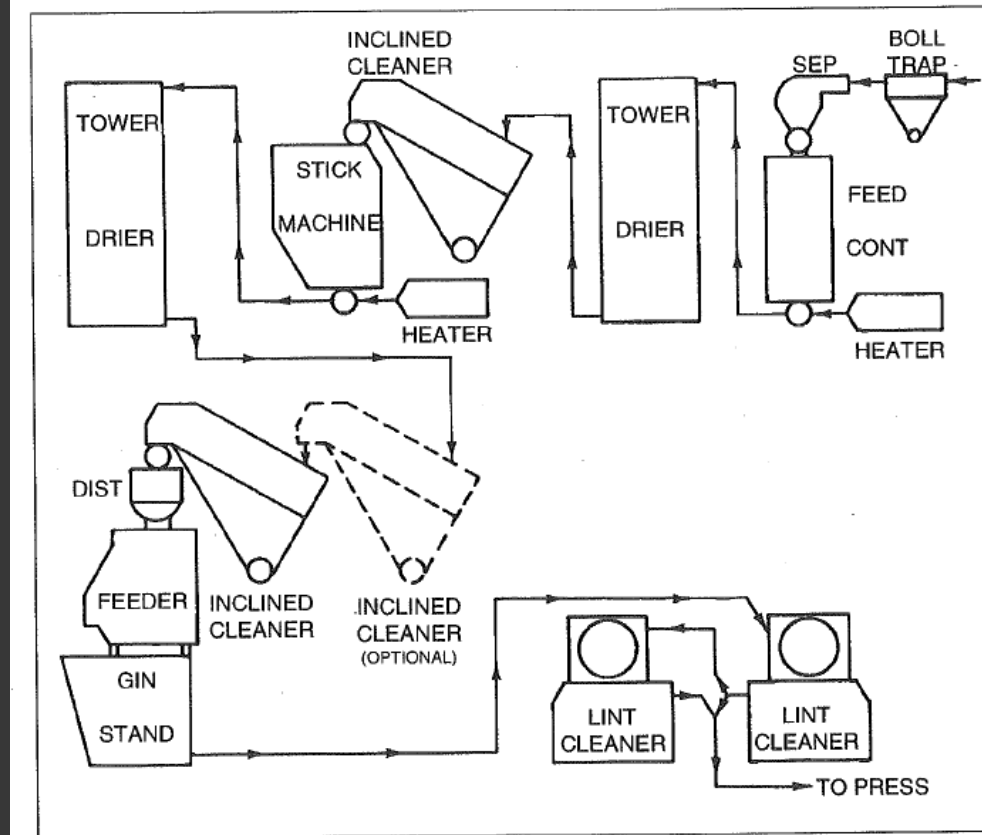
Inside a Cotton Picker Head



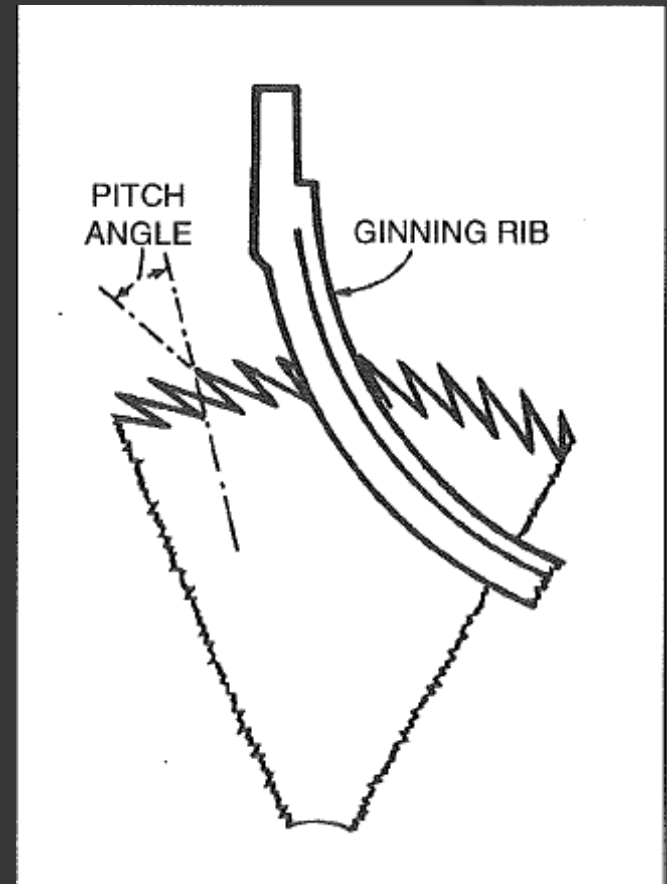
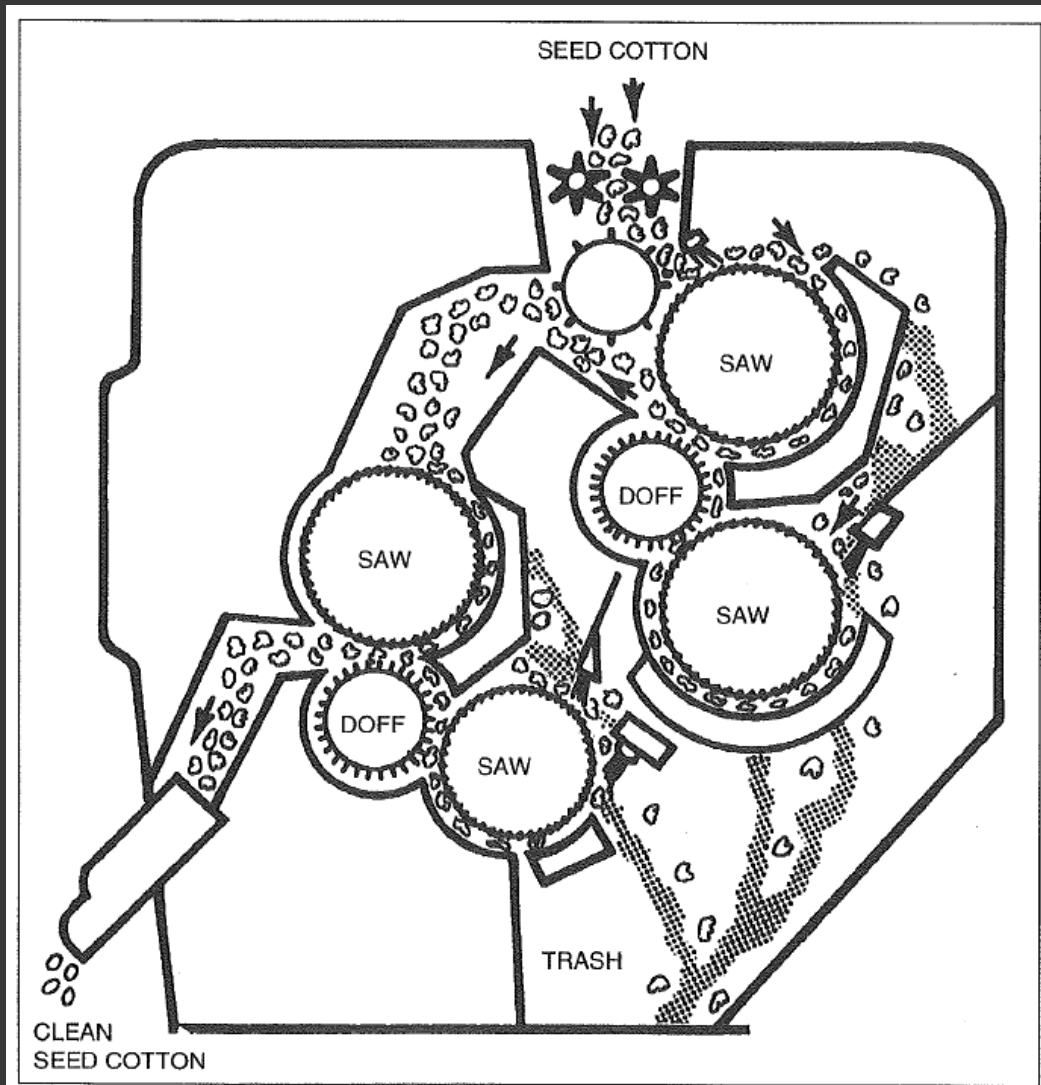
- ◎ Spindles – approx. 600/Row
 - 2, 4, 6 or 8 Rows
- ◎ Doffers – clean cotton from spindles
- ◎ Fan – transfers cotton to basket
 - Cotton – trash – dirt – any contamination
- ◎ Cotton packed into Modules



Cotton Ginning Process

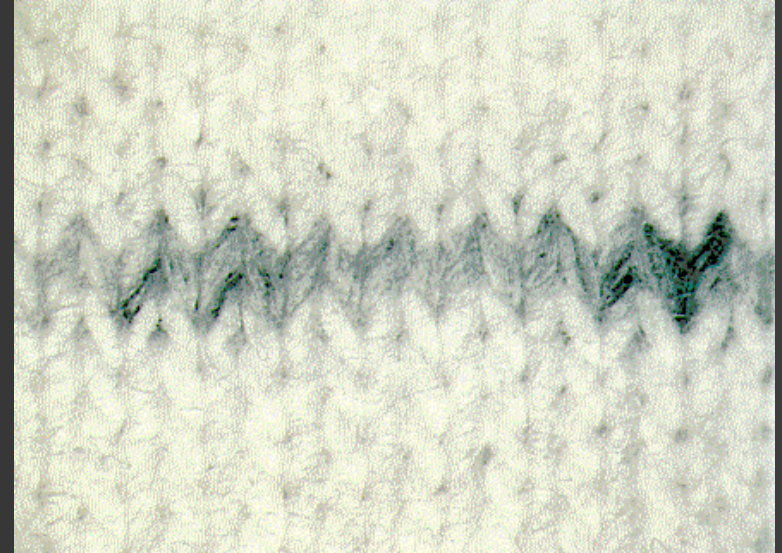


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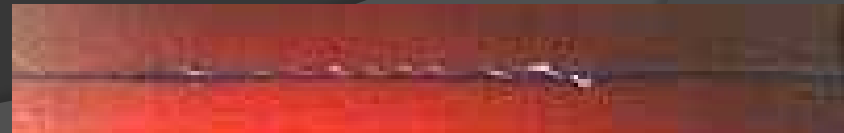
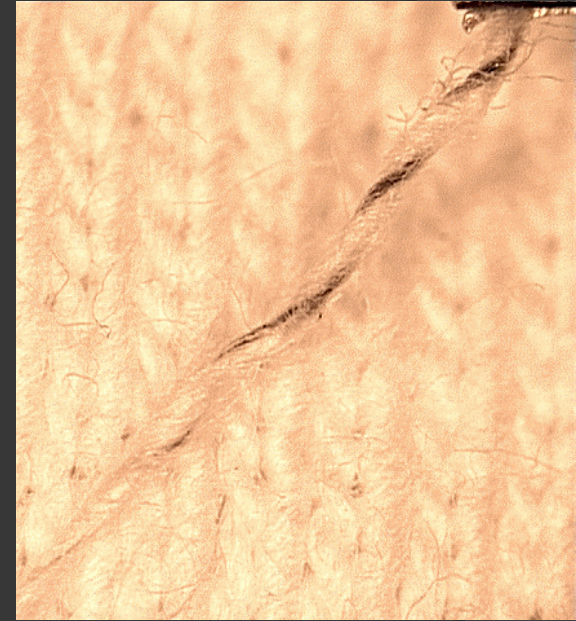


Problems With Cotton Contamination

- Contamination chopped into small pieces – impossible to remove from ginned cotton
- Reduced spinning quality
- Problems with dying cotton
- Inferior finished products
- Tainted cotton discarded or sold at discount
- Permanent Bale ID – who is held responsible?
 - Textile Mill/Manufacturer → Gin → Producer
 - Refuse to buy cotton (mill in NC) or legal issues



Contamination in Cotton Products



Problems for Animals?

- ⦿ Animals may ingest polypropylene
 - Cows, goats, sheep, horses, wild animals
- ⦿ Smell of Food?
- ⦿ Cause obstruction in animal's throat, stomach or digestive tract
 - Causes choking or tangling that lead to infection and death
- ⦿ Not a regular occurrence
 - Expensive – Veterinarian costs or loss of animal
 - Loss of 1 cow - \$700 - \$900



What's the Solution?



Questions????

