

# Beneficial Management Practices to Reduce the Burning of Flax Straw

Presented to:  
**Soils and Crops  
Workshop**

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by

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The goal of SaskFlax and funding from the Agricultural Environmental Group Plan is to reduce the burning of flax straw through:

- 1) demonstration of alternative methods of dealing with flax straw
- 2) providing information to producers about possible alternatives

# Standing Straw

- The following field and straw management options are beneficial management practices that apply to straw that is standing in the field and not to straw that is lodged, flattened, baled or already partly worked into the soil

# NO Possibility to Use or Sell Flax Straw ...

- Option 1
  - Swath;
  - Put swaths through combine to chop and spread
  
- Consider if:
  - trap snow, erosion control/nutrient recycling
  - NOT too tough to chop, weedy field
  - no nearby straw processor, no local use

# ... NO Possibility to Use or Sell Flax Straw ...

- Option 2
  - cut straight;
  - put through combine to chop and spread
  
- Consider if:
  - trap snow, erosion control/nutrient recycling
  - NOT too tough to chop, weedy field
  - no nearby straw processor, no local use

# ... NO Possibility to Use or Sell Flax Straw ...

- Option 3
  - cut straw high using straight cut or stripper header
  - leave straw standing over winter
  - direct seed into standing straw in spring
- Consider if:
  - trap snow, erosion control/nutrient recycling
  - too tough to chop, weedy field
  - no nearby straw processor, no local use
  - have implement that you can direct seed with



# ... NO Possibility to Use or Sell Flax Straw ...

- Option 4
  - swath or straight combine crop
  - use forage chopper to pick up straw and spread over entire field
  
- Consider if:
  - trap snow, erosion control/nutrient recycling
  - too tough to chop, weedy field
  - no nearby straw processor, no local use

# ... NO Possibility to Use or Sell Flax Straw ...

- Option 5
  - use heavy harrows to break up remaining straw
  - second/third harrowing after straw is a little rotted
  
- Consider if:
  - trap snow, erosion control/nutrient recycling
  - stubble too thick to seed into, weedy field
  - not sandy land, harrowing will NOT lead to soil erosion
  - no nearby straw processor, no local use

# There IS Possibility to Use or Sell Flax Straw ...

- Option 6
  - drop straw in windrows
  - use bales for cattle shelters/bedding, mulch, erosion control in ditches/gullies, bio-fuel
- Consider if:
  - do NOT need to trap snow or erosion control
  - too tough to chop
  - NOT too weedy field (unless considering bio-fuel uses)
  - HAVE local uses for straw



# ... There IS Possibility to Use or Sell Flax Straw ...

- Option 7
  - drop straw in windrows and bale
  - sell to flax straw processing plant that takes unretted, combined straw
  
- Consider if:
  - do NOT need to trap snow or erosion control
  - too tough to chop
  - field NOT too weedy, NO plastic contamination
  - nearby straw processor
  - NO other local uses for straw



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# ... There IS Possibility to Use or Sell Flax Straw ...

- Option 8
  - roll with land roller or cut low and spread straw in thin even layers with rotary mower
  - allow to ret (late fall or early spring)
  - rake up straw into windrows and bale
  - bring to processing plant for purchase









# ... There IS Possibility to Use or Sell Flax Straw ...

- Consider if:
  - do NOT need to trap snow or erosion control
  - too tough to chop
  - field NOT too weedy, NO plastic contamination
  - nearby higher end straw processor that will pay premium for quality retted straw
  - NO local uses for straw

# ... There IS Possibility to Use or Sell Flax Straw ...

- Option 9
  - cut straw with straight or stripper header
  - use rotary/sickle mower followed by packer (if necessary)
  - leave standing strips of straw to trap snow
  - allow to rot (late fall/early spring)
  - rake straw and bale
  - bring to processing plant for purchase



# ... There IS Possibility to Use or Sell Flax Straw

- Consider if:
  - NEED to trap snow or erosion control
  - too tough to chop
  - field NOT too weedy, NO plastic contamination
  - nearby higher end straw processor that will pay premium for quality retted straw
  - NO local uses for straw

# Planting to Harvest BMP'S ...

- These options apply to the flax crop from planting to just before harvest to reduce need to burn straw
  - pick varieties with lower fiber content
  - seed earlier (often produces shorter straw)
  - use high level of nitrogen (often produces lower fiber content)
  - use higher seeding rates (more competition for weeds and makes straw more commercially attractive)

# ... Planting to Harvest BMP'S

- Pre-harvest options (cont)
  - spread seed wider in the row (more competition for weeds and makes straw more commercially attractive)
  - use narrower row spacing
  - spray second time for broad leaf or grassy weeds (gives higher seed yield, straw more attractive to commercial buyers)

# Any Questions?

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