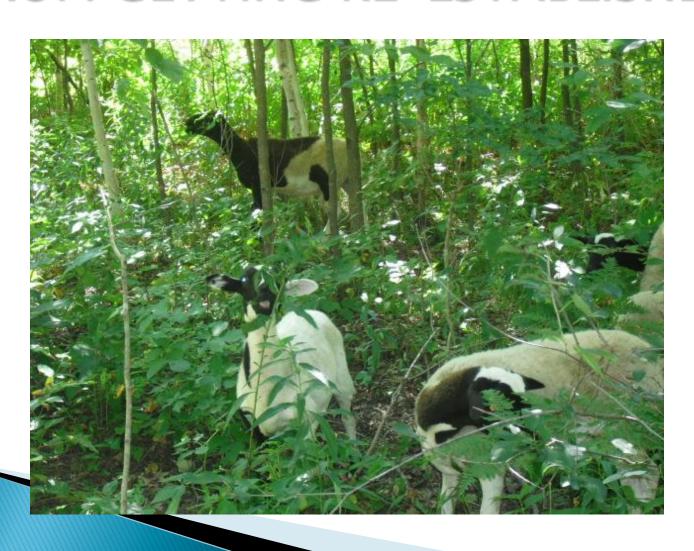
# CONTROLLING BUCKTHORN WITH SHEEP

PART THREE BY NANCY LUNZER

## PART THREE: CONTROLLING BUCKTHORN WITH SHEEP



# PRESSURE BY GRAZING SHEEP WILL PREVENT BUCKTHORN SEEDLINGS FROM GETTING RE-ESTABLISHED.



#### HAIR SHEEP WERE CHOSEN BECAUSE THEY BOTH GRAZE ON GRASS AND BROWSE ON BRUSH



# HAIR SHEEP DON'T REQUIRE SHEARING, DE-HORNING OR TAIL DOCKING.



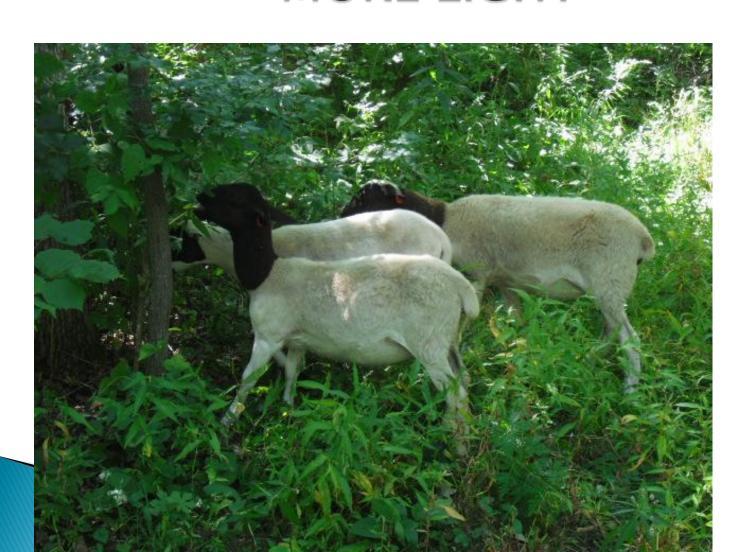
# THEY EAT BUCKTHORN AND MOST OTHER PLANTS



# SHADE GRASS VARIETIES ARE SHADE TOLERANT



# BUT SHADE GRASS WILL PRODUCE MORE FORAGE IF IT RECEIVES MORE LIGHT



### DECAYED OR DAMAGED TREES WERE REMOVED TO OPEN THE CANOPY



# REMOVAL OF OLDER TREES ALLOWS YOUNGER TREES TO GROW



# THE CULLED TREES WILL BE USED AS FIREWOOD



# GRASS IS ALLOWED TO GROW SIX INCHES TALL BEFORE GRAZING



# SHEEP ARE REMOVED WHEN GRASS GETS SHORTER THAN THREE INCHES



# AREAS NOT HOGGED OFF WILL BE GRAZED BY SHEEP TO SEE THEIR IMPACT ON BUCKTHORN



# WOODLAND PLANTS ARE A VIABLE FEED SOURCE FOR SHEEP



# PARASITE INFESTATION OCCURS WHEN SHEEP GRAZE THE SAME AREAS ALL SEASON LONG



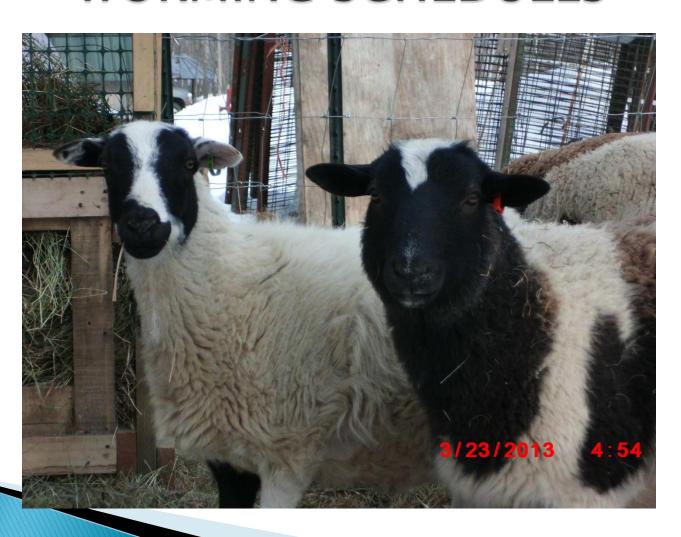
### ROTATING SHEEP TO NEW PASTURES WILL BREAK THE PARASITE CYCLE



### ROTATING WITH OTHER SPECIES WILL REDUCE SPECIES SPECIFIC PARASITES



# TRADITIONAL PARASITE MANAGEMENT INVOLVES PERIODIC WORMING SCHEDULES



#### FECAL EGG COUNT

- FECAL EGG COUNTS CAN DETERMINE AMOUNT OF PARASITE INFESTATION
- THESE SHEEP HAD A MILD INFESTATION AND WERE WORMED TO PREPARE FOR BREEDING.
- A RE-CHECK WAS DONE 3 WEEKS BEFORE LAMBING AND NO PARASITE EGGS WERE FOUND AND NO WORMING WAS NEEDED
- FECAL TESTING HAS ALREADY REDUCED THE USE OF WORMERS ON THIS FARM
- REDUCED USE OF WORMERS WILL PREVENT PARASITE RESISTENCE TO WORMING AGENTS

### SUSTAINABLE AGRICULTURE RESEARCH AND EDUCATION

- A SPECIAL THANKS TO SARE FOR MAKING THIS PROJECT POSSIBLE
- AND A SPECIAL THANKS TO TONY MILLER, OF THE MINNESOTA DEPARTMENT OF NATURAL RESOURCES FORESTRY DIVISION, MORA MINNESOTA WHO OVERSAW THIS PROJECT FROM ITS ONSET IN 2010.
- AND A SPECIAL THANKS TO NATE TEIG OF AMERY, WISCONSIN WHO HAS BEEN A GREAT RESOURCE FOR THE MANAGEMENT OF THE HAIR SHEEP.
- NOTE AND A SPECIAL THANK YOU TO SCOTT WAGNER WHO WORKED ON EVERY ASPECT OF THIS PROJECT TO MAKE IT A SUCCESS.