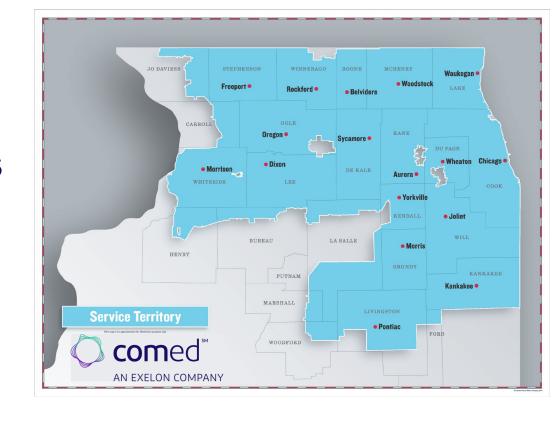
# Goats as a Vegetation Management Solution

**Kelvin Limbrick** 

ComEd Vegetation Management Senior Program Manager

## **ComEd System**

- The ComEd Transmission system is made up of over 5,400 miles of transmission lines
  - Voltages vary from 765kv to 69kV
  - 127,000 acres
  - 15,000 potential acres of habitat
  - 500+ acres of ComEd Prairie
  - Covers most of northern Illinois
    - Indiana to Iowa
    - Wisconsin to Springfield, IL
- 5-year Vegetation Management cycle



### **Examples: Skokie Valley Bike Path Before and After (2023)**













## **Quantifying Success as of 2023**

- Safety and Reliability
  - 2023 ReliabilityOne® Outstanding System Reliability Award
  - 2023 ReliabilityOne® Award for Outstanding Reliability Performance in the Midwest Region
- CCAA Milestones
  - 8,505 Adopted Acres
  - 4.5 million milkweeds distributed
    - 1.5 million purchased and being distributed and tracked across the system for 2024
  - 1,384 plots sampled
  - 7.5 milkweed stems plot average
  - 170 monarchs detected



### Let's goo...at it



**Click link to view video** 

## **Targeted Grazing**

- "Targeted, prescribed, or conservation grazing:"
  - Managing specific livestock in a strategic way to achieve specific land management goals
- Goats target broad-leafed weeds and woody vegetation
- Kiko goats typically eat around 10-20% of its body weight daily in fresh vegetation
- No chemicals or heavy machinery in steep or uneven terrain!



## **Targeted Grazing**

- Stress targeted plants and rob them of vigor dramatically reducing reproduction and killing plants if applied correctly
- Can push down vegetation up to six feet tall
- As ruminants, their four-part digestive systems ferment the vegetation they eat
- Many species of weed seeds are not viable after passing
- Free fertilizer!



## Why We Use Goats

"These ravines are crazy steep; we need a goat to clear it!"

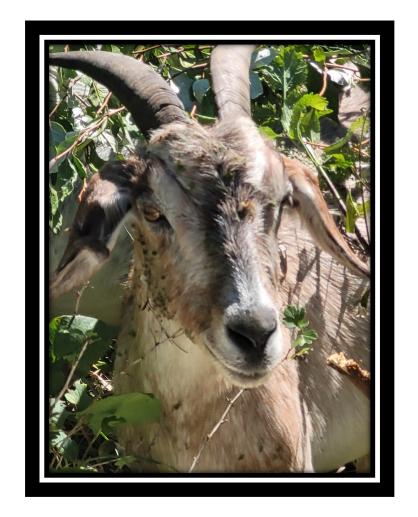






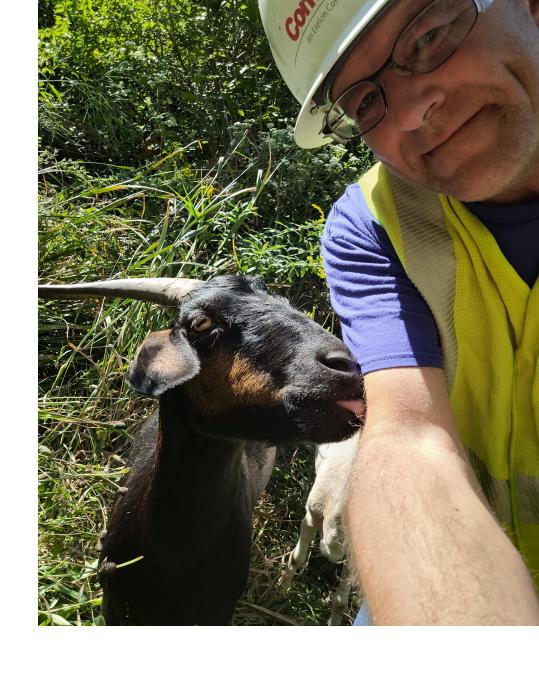




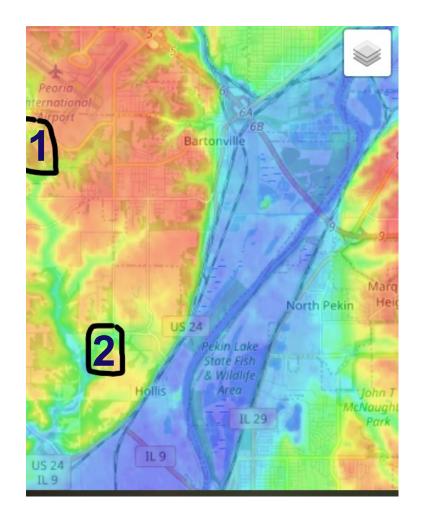


## Why We Use Goats

- Steep ravines with creeks in the bottom in sensitive areas
- Mowing equipment cannot be used safely due to slope
- Estimated manual contractor workforce for 600-800 work hours; ~\$150K for 3 weeks
- Due to the terrain and weather, worker slips and falls are a concern
- After performing research, we found a contractor and the estimate to use goats to clear the brush was \$15-20k per year



#### **The Peoria Location**





- Nine acres located inside Peoria airport property on the Illinois Air National Guard base
  - Maintained and monitored by USDA
- Eight acres on private land

- Elevation changes
  - Section 1-54' change in elevation
  - Section 2-63' change in elevation

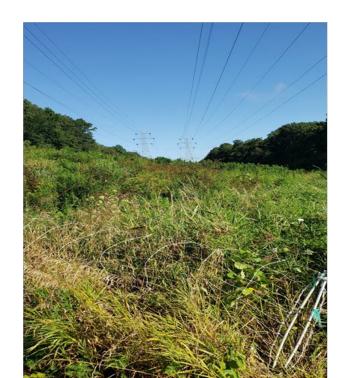


**Click link to view video** 

## **Peoria Before and After**





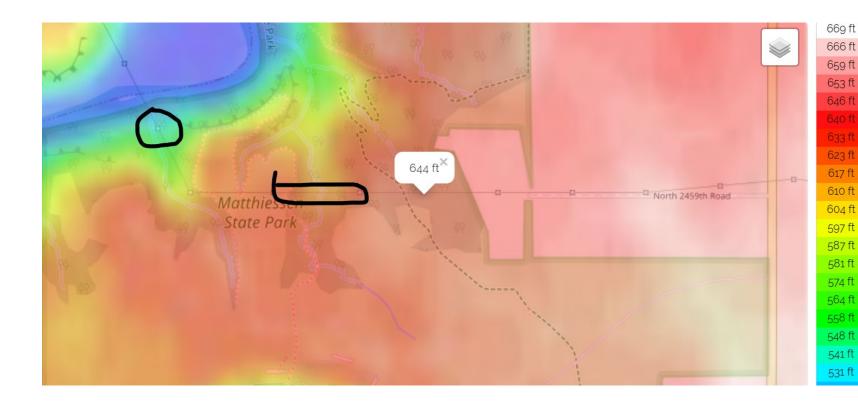




#### 2022-2024 Location

#### The Oglesby Location

- Seven Acres at Matthiessen State Park
- 35 teenage male goats
- Coordination between ComEd and IDNR
- 113' difference in elevation between the two locations
- Will return in 2024
- In 2018 for three crews for weeks cost \$75,000
- Goat use showing 70% savings so far



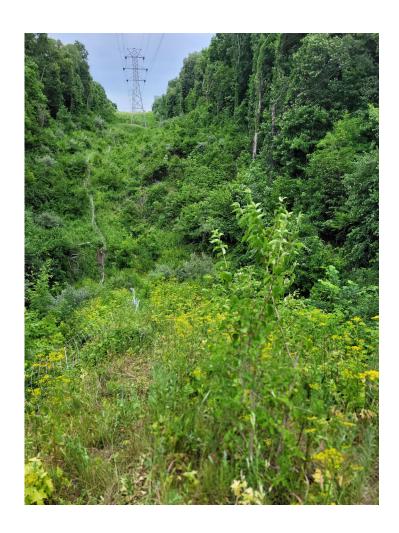
## **Oglesby Location 1 2022 Before and After**







## Oglesby Location 1 2023 Before and After (N)







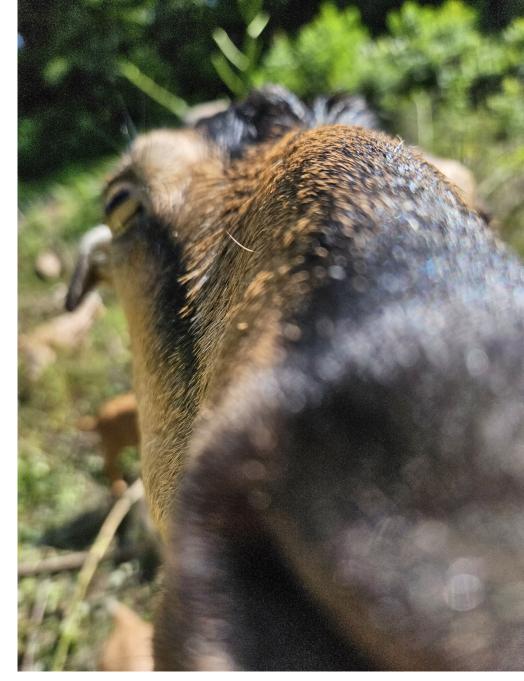
## Oglesby Location 1 2023 Before and After (Ravine S)





#### **Lessons Learned**

- Large herd (200 goats) eats approximately ¾ acre/day
- Small herd (35 goats) eats about two acres/ week
- Moms and kids are hard to work with
- Hard to herd or predict productivity
- Become ineffective/bored after being in same area for four weeks
- They will leave
- Ensure that fenced areas are away from gullies in heavy rain
- Ensure local authorities have contact info



## **Social Media/Communications Campaigns**



2019-Petting Zoo Daley Plaza



2021-Hot Goat Summer



2020-GoatTerns



2022-Goat Boat Parade

#### 2022 Goats on Boats!



Goats afloat: ComEd thanks brush-eating critters with Chicago River cruise



By Rachel Pierson | August 31, 2022 Potential Audience Reach: 416.1K

#### **Patch**

Goats On Boat Tour Chicago River Before Heading To Work



By Jonah Meadows | August 31, 2022 Potential Audience Reach: 1M

- Second annual goat boat parade
- Received national attention in 40 cities
- Just under 30 million homes reached



Goats will receive a river cruise to help celebrate the end of summer!



#### STARVED ROCK COUNTRY

Goats Take Boat Detour On Way To Matthiessen State Park



By Ryan Searl | August 31, 2022 Potential Audience Reach: 53





Goats On A Boat: Illinois Electric Company Treats Goats To River Cruise



By: News Desk | September 1, 2022



There's going to be a Goat Parade on the Chicago River Today



By: Cara Carriveau | August 31, 2022 Potential Audience Reach: 1.1K





## **2023 Windy City Goat Tour**



CNN 10: The big stories of the day, explained in 10 minutes



August 30, 2023 Potential audience reach: 74.5k



Regresan a Chicago las cabras de la compañía de ComEd



By: Staff | August 30, 2023 Potential audience reach: 29.8k



ComEd goats tour downtown Chicago after 2 weeks of work



By: Staff | August 30, 2023 Potential audience reach: 543



ComEd goats tour downtown Chicago after 2 weeks clearing vegetation near LaSalle County power lines



By: John Garcia | August 29, 2023 Potential audience reach: 146.7k

- Goats toured Chicago and met their fans
- Received more than 100 print and broadcast stories in 29 states
- Nearly 3 million homes reached





©2 CBS Chicago

No kidding! ComEd goats get a 'thank you ' tour of Chicago



By: Staff | August 29, 2023 Potential audience reach: 76.1k



ComEd goats tour Chicago



By: Staff | August 29, 2023 Potential audience reach: 76.1k



ComEd's lawn-mowing goats celebrate after clearing 7 acres of vegetation



By: Staff | August 29, 2023 Potential audience reach: 49.5k



What a trip: Goats get Chicago tour for keeping power lines free of vegetation



By: Carolina Garibay| August 29, 2023 Potential audience reach: 416.8k



## Thank you

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