

# FEDERAL NATURAL RESOURCE DIVISION



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## **Beau Long – Federal Operations Director**

- Started in Vegetation Management in 1984
- Utilities, Forestry, Aquatics, Rangeland

## **Dick Champine – Senior Military Consultant**

- Air Force / ANG Pilot for 28 years
  - Air to Ground Range Officer at Ft. Drum 1975 - 1998
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- **First project in 2004 was 54 acres at Fort Drum**
  - **To date we have sprayed over 16,000 acres at Fort Drum**
  - **CPS team members have done service work or sold product at over 30 different installations**
  - **Primary issues are**
    - **Line of Sight**
    - **Invasive Species**
    - **Growth inhibitors to reduce mowing cycles**
    - **Vegetation Encroachment**
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# WHO IS CPS

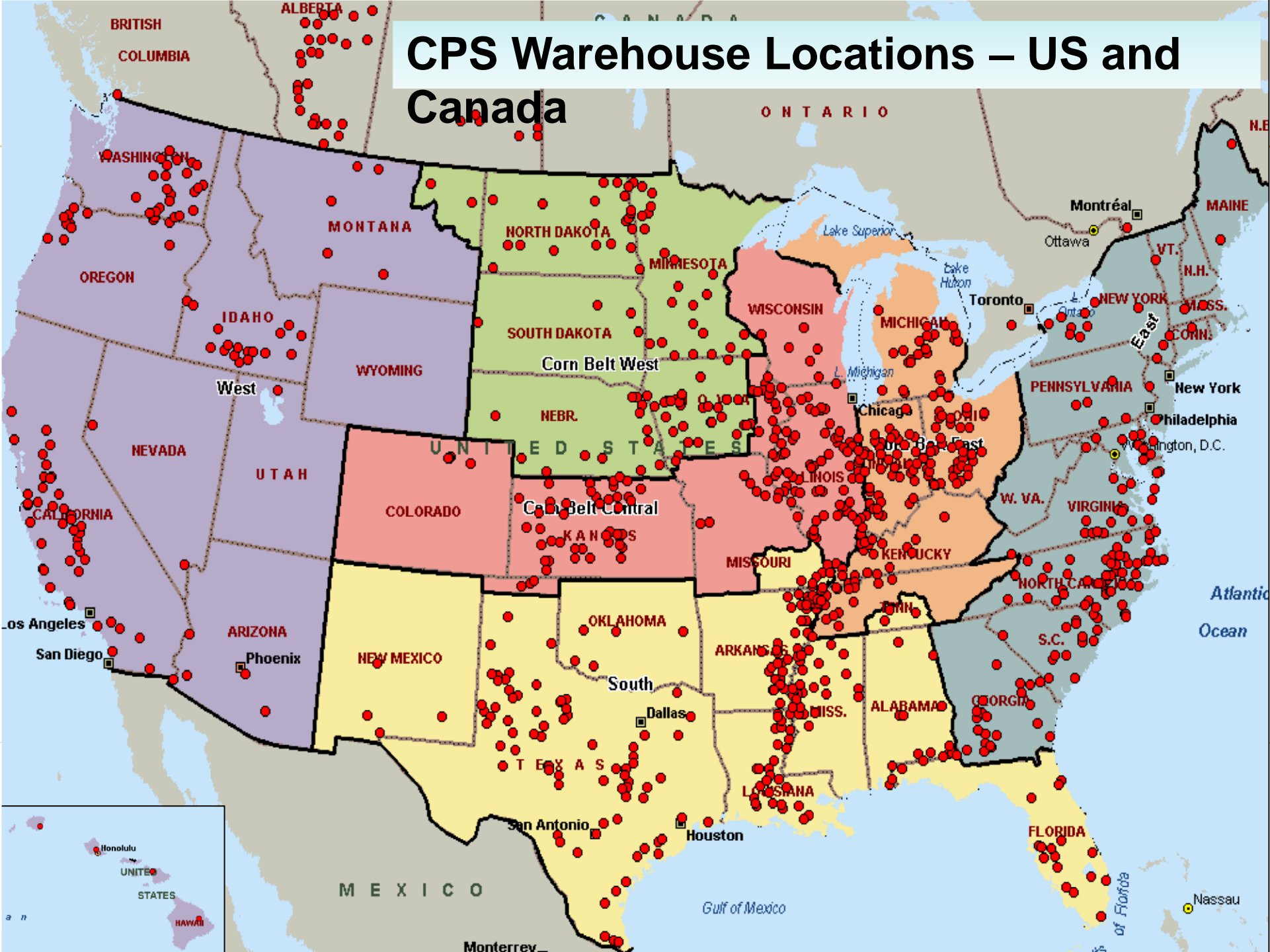
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- CPS is a global company specializing in both crop and non-crop vegetation management.
    - Specialty business units focusing in:
      - Vegetation Management, Forestry & Aquatics
      - Turf & Ornamental
      - Fertilizers
  - We have more than 8,500 employees in the US
  - CPS is the largest national distributor in the US with an annual gross sales of more than \$10 billion
  - 850+ warehouse locations across the United States
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# CPS Warehouse Locations – US and Canada



# 2012 – 2014 INSTALLATION PROGRAMS

Northeast		Southeast		Other	
Fort Drum		Fort Stewart		Fort Campbell	
West Point		Fort Gordon		Fort Sill	
Fort Devens		Fort Jackson		Texas Army Guard (Camp Swift)	
Tobyhanna Army Depot		Fort Pickett		Fort Hood	
Fort Indiantown Gap		Fort Eustis		Fort Hunter Liggett	
Fort AP Hill		Fort Lee		Schofield Barracks	
Fort Bragg		Camp Blanding		Fort Huachuca	
Moody AFB					

# EXAMPLES OF SOME OF THE INVASIVE SPECIES WE COMMONLY TREAT



**Guinea Grass**

**Medusahead Rye**

**Cheatgrass**

**Phragmites**

**Yellow Starthistle**

**Sericea Lespedeza**



# OP 9, FORT DRUM, PRE AND POST TREATMENT, 2007 TO 2014



**Lost targets due to vegetation overgrowth**

**This area has been treated twice over a period of 7 years**



# FT DRUM – TIMBERMARK SYSTEM



## TimberMark

- Capable of translating GIS inputs into lines on the ground, making the invisible lines visible.
  - Provides one more layer of credibility for project managers responsible for public affairs.
  - Utilizes Nelson tree marking paint for marking operations.
  - The same pilot that does the painting applies the herbicides, thus providing one more layer of awareness within the spraying operation.
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- <http://www.mainemark.com/>



# FT DRUM – TIMBERMARK DELINEATION



## TimberMark Delineation

- Paint used to delineate area to be sprayed.
- Riparian Zone
- Unplotted beaver pond
- Is it or is it not a wetland - It's Environmental's call



# FT DRUM – TIMBERMARK DELINEATION



## TimberMark Delineation

- Paint used to delineate area to be sprayed.
- Paint is designed to last one year.
- Requirement for use is written into the Ft. Drum Environmental Assessment.



# BATCHING OPERATIONS



## Batching Operations

- Self contained system
- Mobile
- BMP (Industry Standard)
- Cost Efficient
- Cost Per Acre + or - \$300

# HERBICIDE OPERATIONS



## Flight Operations

- System is calibrated at 65 MPH
- GPS tracks nozzles on / off
- BMP (Industry Standard)
- Mobile



# ACCU-FLO NOZZLE



## Accu-Flo Nozzle

- **Designed for helicopter / aircraft delivery systems**
- **Uniform size droplets**
- **Can be used for most applications**
- **Provides consistent, dependable, accurate drift control**



# RIPARIAN BUFFER ZONES



## Riparian Buffer Zone

- A vegetated area near a stream
- Normally forested
- Shades and partially protect a stream from the impact of adjacent land uses.
- Normally 50 ft. to 150 ft. wide as directed by the Environmental office.



Pre-Treatment October 2005



Post Application July 2006



FT DRUM  
OP 6A

July 2009 – 3+ years after Treatment

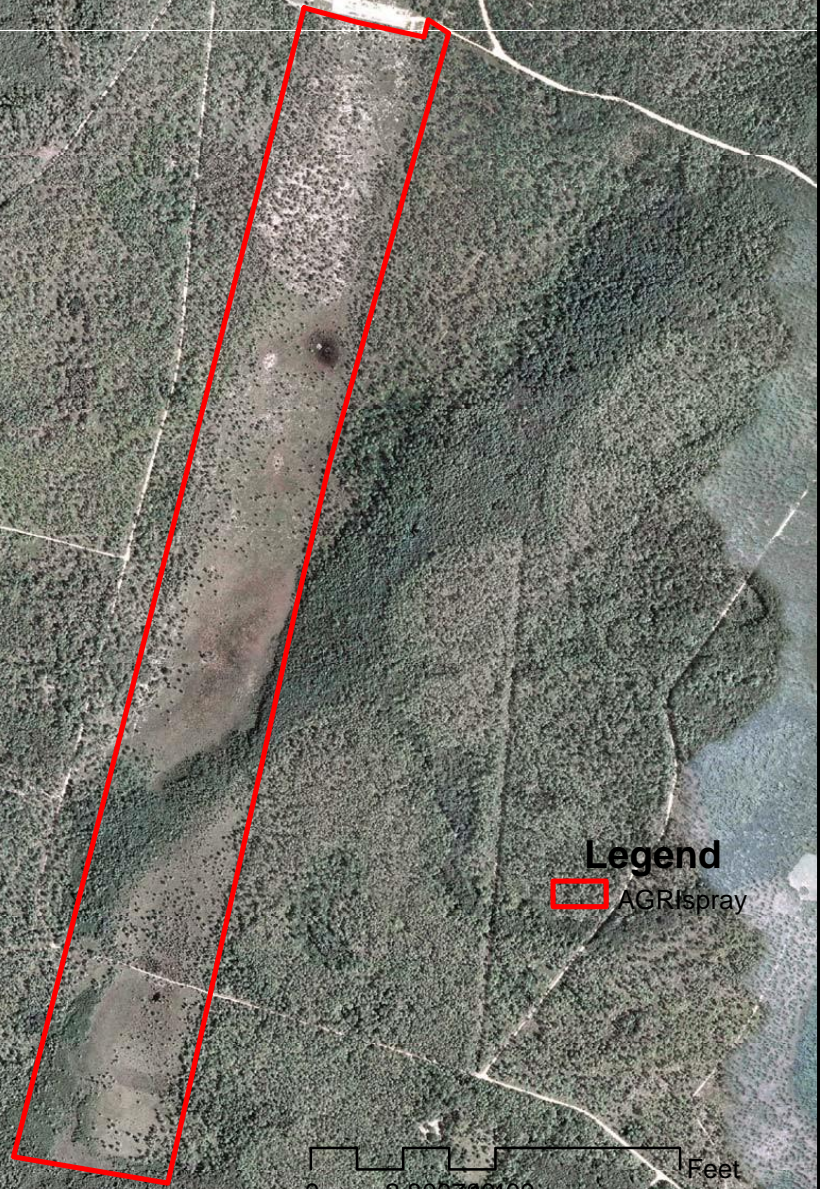


July 2013 – 8 years after Treatment





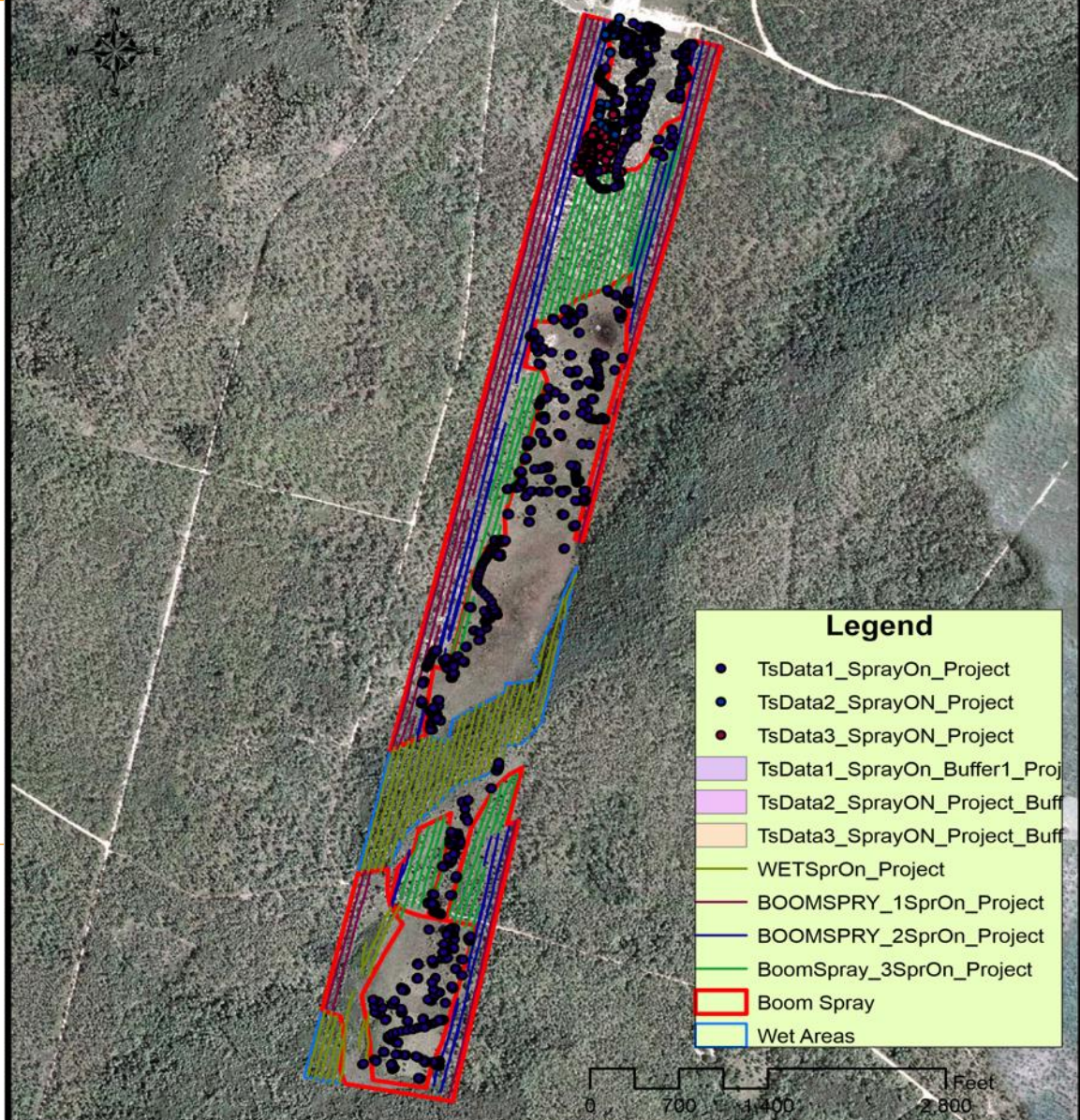
# Ft. Stewart provided data



**Legend**  
AGRIspray

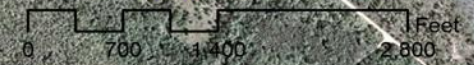


# Ft. Stewart post flight



**Legend**

- TsData1\_SprayOn\_Project
- TsData2\_SprayON\_Project
- TsData3\_SprayON\_Project
- TsData1\_SprayOn\_Buffer1\_Proj
- TsData2\_SprayON\_Project\_Buff
- TsData3\_SprayON\_Project\_Buff
- WETSprOn\_Project
- BOOMSPRY\_1SprOn\_Project
- BOOMSPRY\_2SprOn\_Project
- BoomSpray\_3SprOn\_Project
- Boom Spray
- Wet Areas





# RED COCKADED WOODPECKER HABITAT RESTORATION (ENDANGERED SPECIES)



## DoD directed RCW recovery operations

- Ft Benning
- Ft Stewart
- Ft Gordon
- Ft Bragg
- We have previously worked on or are currently working at all of the above installations.
- Due in part to herbicide treatments, the DoD has met its quotas and is now providing nesting pairs to other governmental agencies.



# ENVIRONMENTAL CONSIDERATIONS



## Measures of Merit

- MoM #1: All DOD installations will have a current Pest Management Plan.
- MoM #2: DOD will adhere to the principles of Integrated Pest Management (IPM) and maintain the goal of minimizing pesticide usage. The goal is 425,000 lbs of active ingredient per year, the DOD's average annual usage for FYs 2007-2009 and an overall 52% reduction from the original FY 1993 baseline.
- MoM #3: All pesticide applicators will be certified.



# ENVIRONMENTAL CONSIDERATIONS



## Armed Forces Pest Management Board (AFPMB)

- AFPMB approved the list of chemicals that can be used on DOD installations.
- Army Environmental Command (AEC) approves
  - All chemicals used on Army Installations.
  - The application methodology used on Army Installations.
    - Ground Applications.
    - Aerial Applications (normally reserved for impact areas).



# NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

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## Three types of Approvals

- Record of Environmental Considerations (REC)
  - Environmental Impact Statement (EIS)
  - Environmental Assessment (EA)
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# INCREASED WILDLIFE ACTIVITY



## Increased wildlife activity

- Since 2004, we have sprayed over 10,000 acres
- Regeneration provides for increased food sources
- Several different flocks of turkeys were seen during our 2013 spraying project
- During the time frame from 1976 thru 1998, I saw 2 black bears at Ft Drum
- During our 2013 spraying project, I saw 5 different black bears
- During our 2013 spraying project, I saw at least one deer on almost every trip in or out of our working area



# REGAL FRITILLARY BUTTERFLY, (ENDANGERED SPECIES)



## Regal Fritillary Butterfly

- Goal of treatment – Increase the size of the butterfly habitat.
- Pre treatment – total area available for butterfly habitat – 27 acres.
- Post treatment – total area available for butterfly habitat – 60 acres.



# CONTRACTING OPTIONS

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- **Training Support System (TSS)**
  - **GSA**
  - **Service Disabled Partners**
  - **Small Business Partners**
  - **Native Hawaiian Organization (NHO)**
  - **Corps of Engineers**
  - **Department of Justice**
  - **MIPR**
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# THANK YOU

