2017 Heartland CISMA Annual Invasives Workshop

GLYPHOSATE, 2,4-D, TRICLOPYR, AND THE IMAZAP TWO.

Paul Abel
the natives
SCOUTING YOUR PROPERTIES, we need an understanding in order to develop a PLAN

DYNAMIC MANAGEMENT of the DYNAMIC ENVIRONMENT and MICRO-ENVIRONMENT

ARE YOU SCOUTING

- WEEKLY
- MONTHLY
- ETC.
YOUR GOALS

• CONSIDER YOUR DESIRED SHORT AND LONG TERM GOALS

• WHAT METHOD IS MOST APPROPRIATE AND FEASIBLE?

• CONSIDER THE TIMING AND THE SEASON

• BE AWARE OF UNDESIRABLE CONSEQUENCES OF YOUR ACTIONS

• ADJUST YOUR APPROACH WHEN NEEDED
TREATMENT ALTERNATIVES

• SPRAY
• MOW
• TILL
• COMBINATIONS
Glyphosate
2,4-D
Triclopyr
Imazapyr
Imazapic
GLYPHOSATE

• MY MOST USED HERBICIDE
• PERHAPS ONE OF THE SAFER CHEMICALS
• MY AVOIDANCE OF THE TERRESTRIAL BLENDS
• % CONCENTRATION CONSIDERATIONS
• PERHAPS MINIMAL LONG-TERM IMPACTS
• VARIED APPLICATION METHODS AND TECHNIQUES
GLYPHOSATE METHODS AND TECHNIQUES

- CUT SURFACE USE RATHER THAN OTHER CHEMS
- SPOT APPLICATION USE FOR WORKER SAFETY
- SPOT APPLICATION USING VERY COARSE AND DRIZZLE SPRAYING
- BROADCAST APPLICATION AT 5 POUNDS PER ACRE
- BROADCAST APPLICATION TANK MIXES FOR LONGER-TERM CONTROL
2,4-D

- USEFUL TOOL WITH HAZARDOUS CONSIDERATIONS
- LABELS AND SDS IMPORTANCE
- PPE
- VOLITALIZATION, ESTER VERSUS AMINE
- WIND
- NEIGHBORS IN VARIED PROXIMITY
- WEATHER AND USE REPORTING
- IMPENDING RAIN WITHIN 48 HOURS
2,4-D METHODS AND TECHNIQUES

- MY USE ON MOBILE EQUIPMENT ONLY
- MY USE AS FOLIAR ONLY
- BROADCAST APPLICATION AND TANK MIXING WITH GLYPHOSATE
- KEEP MOVING UPWIND
- LINEAR, PARTIAL AREA TREATING
- USE FOR SELECTIVITY
- DAMAGE TO GRASSES
- SPECIES CONTROLLED
TRICLOPYR

- USEFUL TOOL WITH HAZARDOUS CONSIDERATIONS
- LABELS AND SDS IMPORTANCE
- PPE
- VOLITALIZATION
- WIND
- NEIGHBORS IN VARIED PROXIMITY
- WEATHER AND USE REPORTING
TRICLOPYR METHODS AND TECHNIQUES

• BASAL BARK APPLICATIONS IS MY PRIMARY USE
• ANOTHER CHEMICAL I USE AS FOLIAR ONLY ON MOBILE EQUIPMENT
• BROADCAST APPLICATION AND TANK MIXING WITH GLYPHOSATE
• SPECIES CONTROLLED
IMAZAPYR

• USEFUL TOOL WITH HAZARDOUS CONSIDERATIONS
• LABELS AND SDS IMPORTANCE
• SPECIES IMPACT IMPORTANCE
• ENVIRONMENTAL LONGEVITY AND MOBILITY
• PPE
• NEIGHBORS IN VARIED PROXIMITY
• RAINFASTNESS
IMAZAPYR METHODS AND TECHNIQUES

• MY MOST RECENT TOOL FOR BERMUDA GRASS CONTROL
• BACKPACK APPLICATION TO BERMUDA ON NEW SITES
• STAND ALONE EFFICACY
• BROADCAST APPLICATION
• LONGER-TERM PLANT SUPPRESSION ON SITES FOR TILLAGE VIA TANK MIXING, PRE-EMERGENCE
• SPECIES CONTROLLED AND NON-TARGET SPP.
IMAZAPIC

• USEFUL TOOL WITH HAZARDOUS CONSIDERATIONS
• LABELS AND SDS IMPORTANCE
• SPECIES IMPACT IMPORTANCE
• ENVIRONMENTAL LONGEVITY AND MOBILITY
• PPE
• NEIGHBORS IN VARIED PROXIMITY
• RAINFASTNESS
IMAZAPIC METHODS AND TECHNIQUES

• STAND ALONE EFFICACY
• BACKPACK APPLICATION FOR IMPACTED AREAS OF NATIVE GROUND COVER RESTORATION
• BROADCAST APPLICATION ON THOSE SITES AND NATIVE SPECIES TOLERANCE
• PRE-EMERGENT USE
• SPECIES CONTROLLED AND NON-TARGET SPP.
ADJUVANTS

• THE DANGEROUS ONE, MOST LIKELY
• HERBICIDE SPECIFIC SELECTION
• LABEL, SDS, AND PPE REQUIREMENTS
• PENETRANT AND PPE
• DRIFT CONTROL AND PPE
• MARKER DYE FOR EFFICIENCY, ACCIDENTAL RELEASE, AND WORKER SAFETY
• AQUATIC USE IMPORTANCE FOR ENVIRONMENTAL HEALTH
YOUR RESPONSIBILITIES

• PROTECTION OF THE ENVIRONMENT
• PROTECTION OF THE PUBLIC
• PROTECTION OF YOUR WORKFORCE
• PROTECTION OF YOUR WORKFORCE’S FAMILY
• KNOW YOUR LABELS, READ THEM OFTEN
• KNOW YOUR SDSes, READ THEM OFTEN AND BE AWARE OF UPDATES
Fig. 2.5. Seasonal variation of rainfall, 1941–70 average. From Jordan, 1984.
WEED CONTROL

THE FIRST AND SECOND YEARS WILL SET THE TONE

One year’s (weed) seeding = seven years (of) weeding.
APPLICATION OF POST-EMERGENT HERBICIDES & avoiding non-target spp.

? CONTACT or SYSTEMIC

! SOIL ACTIVE RESIDUALS

? % CONCENTRATION

? PRESSURE

? DROPLET SIZE

? MARKING DYE
THANK YOU

• SPONSORS
• HEARTLAND CISMA
• Cheryl Millett
• PRESENTERS

• ATTENDEES