



SEEDING YOUR LANDSCAPE

For Beauty, Health and Wildfire Mitigation

Kendra Brewer



700 ACRE FARM Near Pleasantview

- GROW NAITVE VARIETIES OF FLOWERS AND GRASSES FOR SEED





SOUTHWEST SEED CLEANING FACILITY AND OFFICE between Dolores and Cortez



- Clean and store seed
- Seed sales
 - Agriculture
 - Reclamation
 - Landscaping
 - Homeowners

SEEDING DISCLAIMER



WHY SEED?

THE FAR SIDE • Gary Larson



The woods were dark and foreboding, and Alice sensed that sinister eyes were watching her every step. Worst of all, she knew that Nature abhorred a vacuum.

Cover Bare Ground

- Reduce erosion
- Weed control
- Habitat
- Beauty

Replace existing vegetation that isn't serving needs

- water use
- flammability

WHAT TO PLANT:

	Seed Categories		
GERMINATES IN 45° – 55°	COOL SEASON	VS	WARM SEASON
EACH SUCCESSFUL SEED IS A DISTINCT PLANT.	BUNCH GRASS	VS	SOD FORMER
NARROW BLADE TYPE LEAF	GRASSES	VS	FORBS
ABLE TO SURVIVE ON LESS H ₂ O	DRYLAND	VS	IRRIGATED
PLANTS FROM OTHER PARTS OF THE WORLD	INTRODUCED	VS	NATIVE
PLANTS THAT LIVE 1 SEASON THEN DIE	ANNUAL	VS	PERENNIAL

GERMINATE IN 55° - 65°

EACH SUCCESSFUL SEED CAN SPREAD RUNNERS LATERALLY

BROADLEAVES, FLOWERS

NEEDS SUPPLEMENTAL H₂O

PLANTS THAT EXISTED LOCALLY BEFORE NEW SPECIES ARRIVED

PLANTS THAT RETURN YEAR AFTER YEAR FROM ROOTS

Season of Green up

Cool Season grasses
GERMINATES IN 45° – 55°



Spring



Summer

Warm Season grasses
GERMINATE IN 55° - 65°



August

October

January

BUNCH GRASS



Arizona Fescue (*Fesuca arizonica*)

SPREADING GRASS



Smooth Brome (*Bromus inermis*)

Grasses



Forbs/ Broadleaves



DRYLAND



IRRIGATED



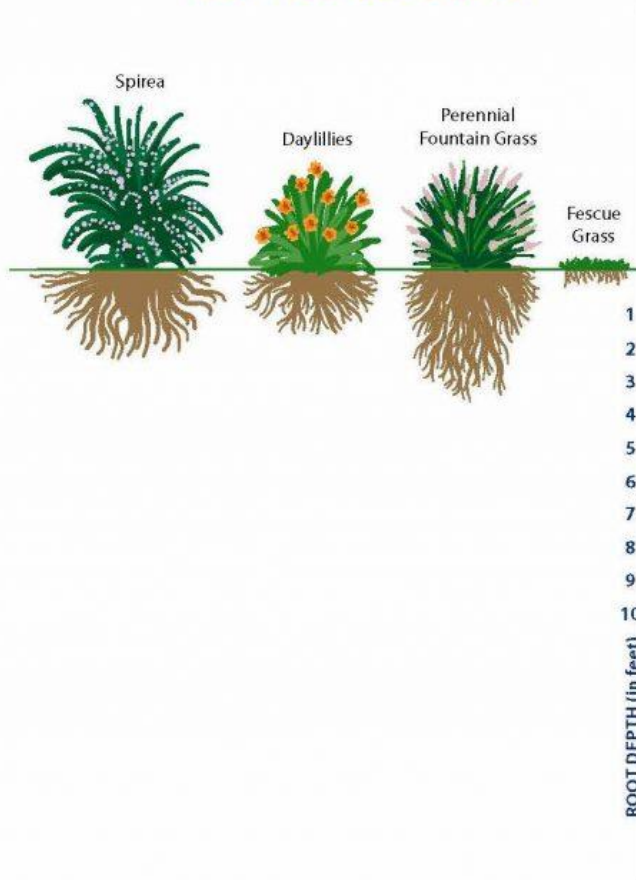
NATIVE



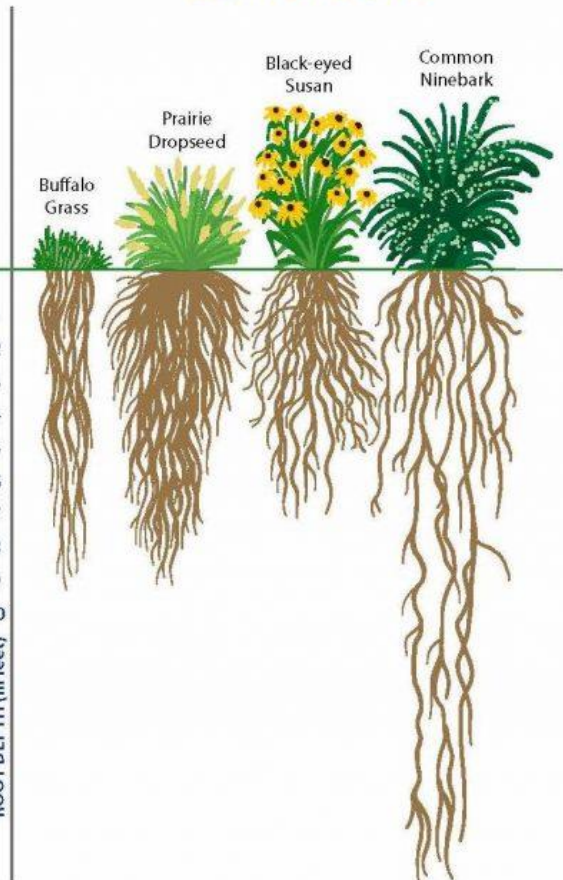
INTRODUCED



NON-NATIVE PLANTS



NATIVE PLANTS



NATIVE



INTRODUCED



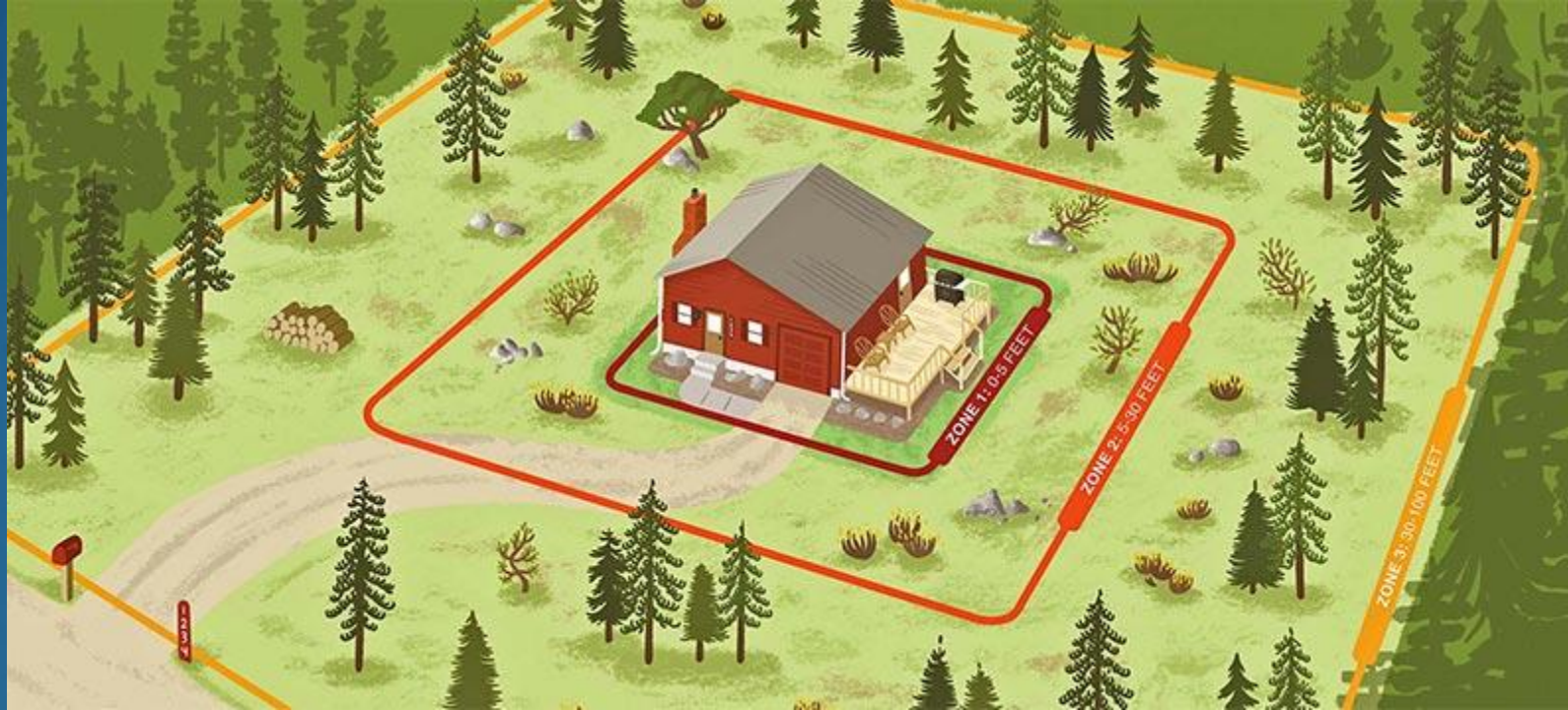
PERENNIALS



ANNUALS



FIREWISE PLANTING IN COLORADO



CSU Extension Factsheet 6.3.5

FOOTHILLS NATIVE MIX

- 40% Slender Wheatgrass
- 20% Indian Ricegrass
- 15% Sandberg Bluegrass
- 15% Arizona Fescue
- 10% Lewis Flax

- Bonus: add Blue grama!



HOW TO READ A SEED TAG



13514 Road 29
Dolores, CO 81323
Phone: (970) 565-8722

Kind: BLUE GRAMA
Variety: CERTIFIED HACHITA
7B 6D

Lot # 2020.0572 (1)

(2) Pure:	87.37
Inert:	12.63
Crop:	0.00
Weed:	0.00

Germ:	86.00
Hard Seed:	0.00
Dormant:	1.00
TZ:	

Pure Live: 76.01 (4)
Test Date: 02/22 (5)

Origin: CO
Noxious Seeds: None Found

WEIGHT (Bulk Lbs): 21.947 (PLS Lbs): 16.682

LAB: Indiana State Seed Laboratory TEST#: 22-4365

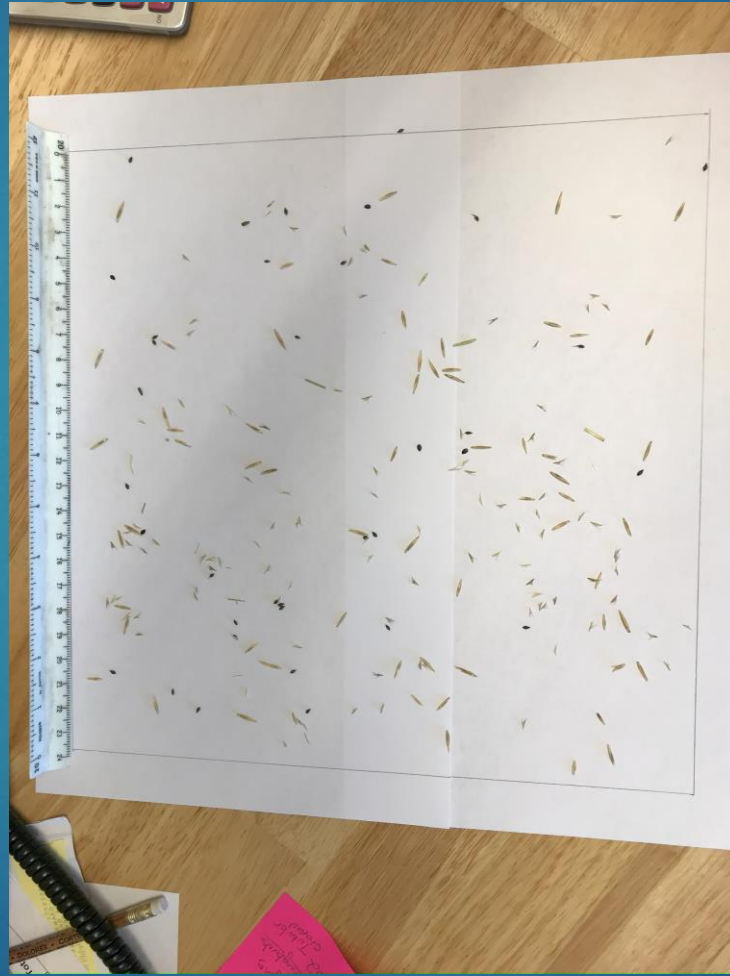
NOTICE TO BUYER - EXCLUSION OF WARRANTY AND LIMITATION. We warrant that the seed sold has been labeled as required in the State and Federal Seed Laws, and that it conforms to the label description within tolerances recognized by law. NO OTHER WARRANTY IS MADE, expressed or implied, INCLUDING without limitation, THE MERCHANTABILITY, THE PERFORMANCE OF THE CROP AS TO YIELD OR QUALITY, OR THE FITNESS FOR PARTICULAR PURPOSES. It is expressly agreed that the liability to the buyer or others from any type of loss shall be limited solely to the amount of the purchase price of the seed. Seed not accepted on the above terms and conditions may be returned to the place of purchase in the unopened containers within 10 days. Under the "Colorado Seed Act" arbitration is required as a prerequisite to certain legal actions, counterclaims, or defenses against a seller of seed. Information about this requirement may be obtained from the Colorado Commissioner of Agriculture.

1. LOT #
2. PURITY ANALYSIS
3. VIABILITY ANALYSIS
4. PURE LIVE SEED
% of what is in the bag that is actual seed and living seed
PLS = Purity % x Viability %
5. Test date

SEEDING RATES



40 SEEDS PER SQ. FT



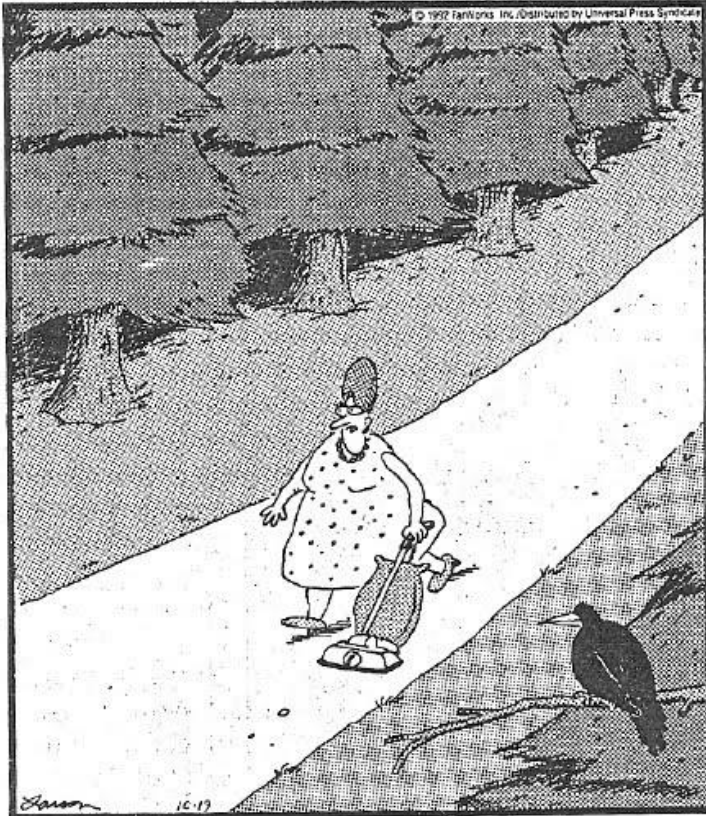
100 SEEDS PER SQ. FT



400 SEEDS PER SQ. FT

WHEN TO PLANT

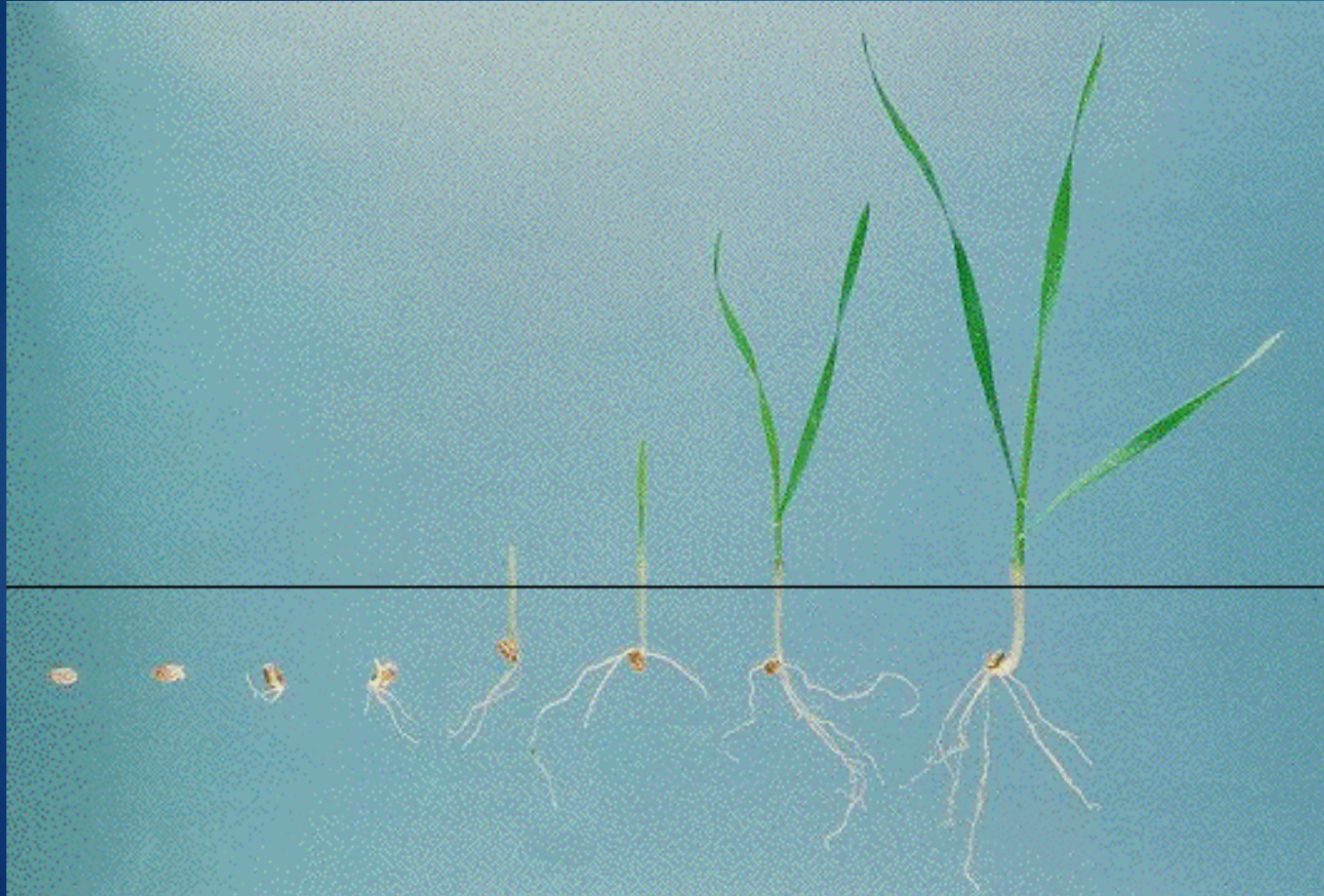
THE FAR SIDE • Gary Larson



The woods were dark and foreboding, and Alice sensed that sinister eyes were watching her every step. Worst of all, she knew that Nature abhorred a vacuum.

- Winter dormant
- Spring
- Late Summer/ Early Fall

GERMINATION



GERMINATION EXAMPLES

<u>SPECIES</u>	<u>TYPE</u> I= introduced, N=Native/ W=Warm Season, C=Cool Season/ A=Annual, P=Perennial	<u>GERMINATION TEMPERATURE RANGE</u> (degrees Fahrenheit)	<u>GERMINATION TIME**</u>
Kentucky bluegrass	I/C/P	50-65	14-28 days
Perennial ryegrass	I/C/P	45-65	7-14 days
Tall fescue	I/C/P	50-65	14-21 days
Thickspike wheatgrass	N/C/P	50-77	7-25 days
Winter rye	I/C/A	34-65	7-14 days
Smooth brome	I/C/P	55-75	14-28 days
Orchardgrass	I/C/P	50-80	7-14 days
Buffalo grass	N/W/P	55+	15-21 days
Indian Ricegrass * Needs vernalization/scarification	N/C/P	40-60	40+ days
California poppy	N/C/A	60-70	15-30 days
Rocky Mtn Penstemon	N/C/P	50-60	14-35 DAYS

**Germination time depends on factors such as seed depth, ideal temperature range and water availability. For some seeds, scarification and vernalization are also factors that will affect germination time and rate.

Find out your current soil temperature!

CSU's Station Data is available online at:

<https://coagmet.colostate.edu/station/selectors>

WARM SEASON VS COOL SEASON PLANTS

Cool Season grasses

GERMINATES IN 45° – 55°



Spring
Late Summer/Early Fall
Winter Dormant

Warm Season grasses

GERMINATE IN 55° - 65°



Late Spring thru Mid Summer

What are the Basic Needs for Germination?

1. Good Seed
2. Water
3. Soil Temperature



THE PERFECT WORLD OF PLANTING

- Most seed needs to be planted $\frac{1}{4}$ " – $\frac{1}{2}$ " deep.
- Virtually all seed in the Arid Southwest MUST be covered with soil.
- Seeds do best with the soil 'packed' around it to hold warm temperatures and moisture around the seed.
- Since none of us live in the perfect world – we aim for the best we can manage.

THE BASICS OF SOIL HEALTH

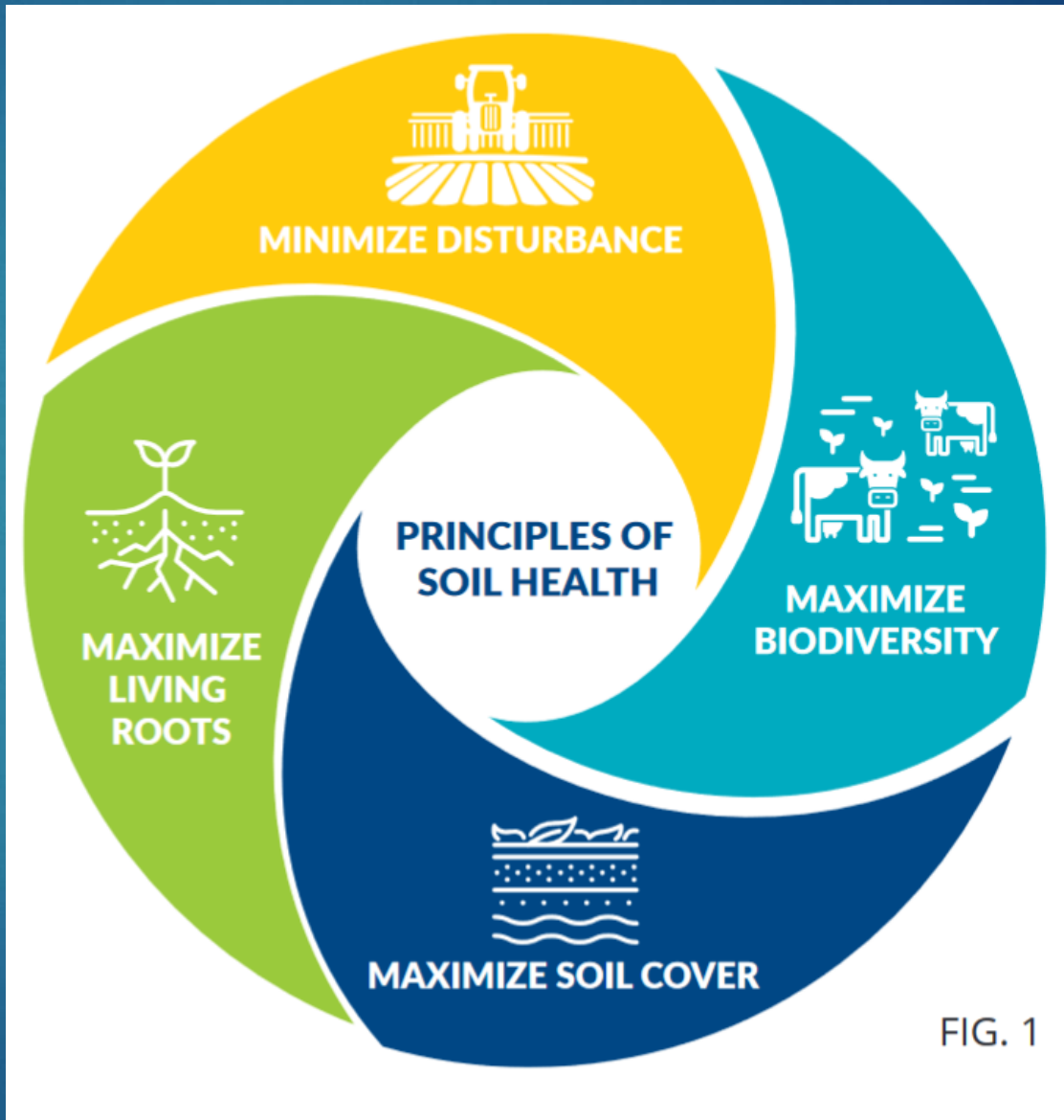


FIG. 1

SOIL PREP AND SEEDING



GOALS:

- Minimize soil disturbance
- Plant seed under
- 1/4-1/2 inch of soil
- Minimize weed growth

SOIL PREP AND SEEDING



METHODS:
DRILL SEEDING
One pass!

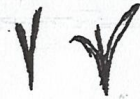
BROADCAST SEEDING
Level
Rake---Seed---Rake
Lightly tamp or roll

WATERING

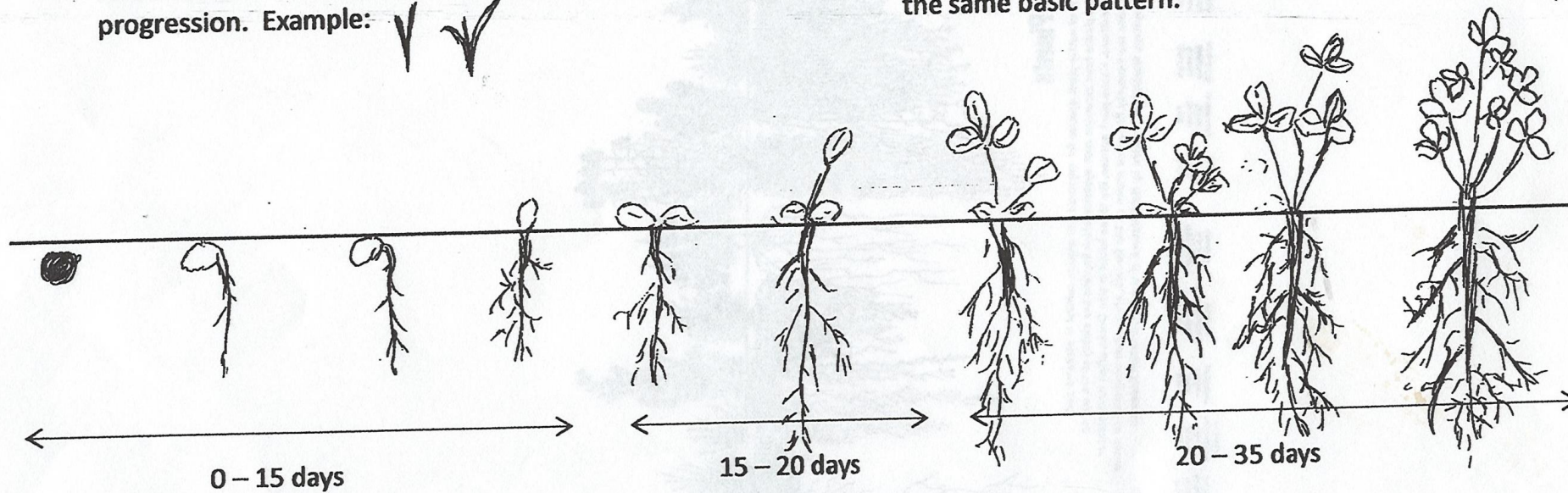
Typical Seedling Development

Important Notes:

- The root growth begins first and in general is more vigorous than the above ground vegetative growth.
- Grass shoots look different but follow the same progression. Example:



- The illustration below shows a broadleaf seedling (a flower or a legume typically.) Example:
- Timing may vary for each species but they follow the same basic pattern.

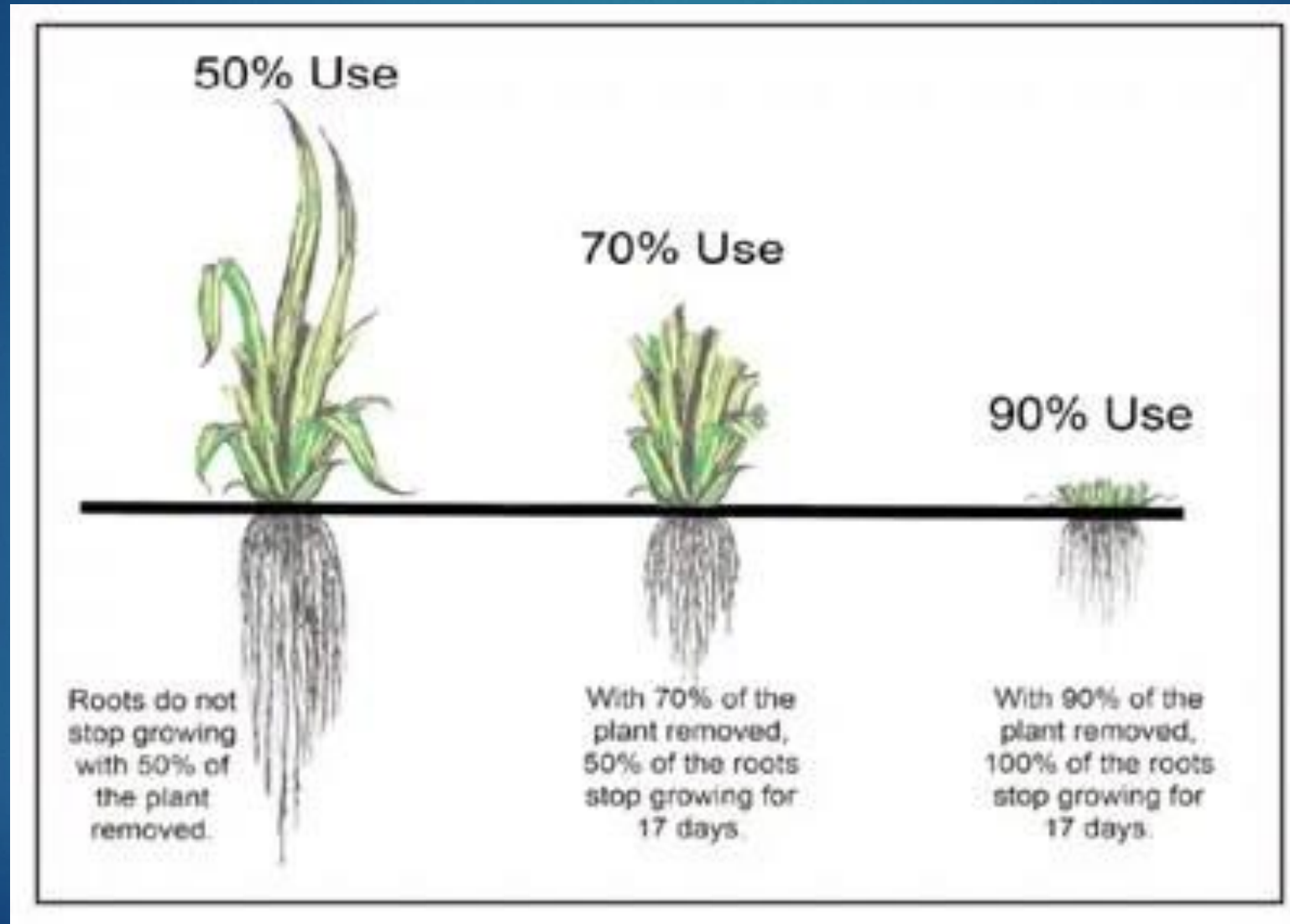


Adapted from Dodds and Meyer, North Dakota State University, 1984

A WORD ABOUT WEEDS



LET IT GROW



RESEEDING/ OVERSEEDING

More challenging than starting from scratch

- Hard to get seed under $\frac{1}{4}$ inch of soil
- Danger of damaging existing plants
- Allelopathic plants

Tips to improve success rate:

- Use No-Till Drill when possible
- Mow or graze existing vegetation first
- Rake up debris/ harrow
- Heavy seed rate

