



TREE EDITION

LAURA MILLER

TEXAS A&M AGRILIFE EXTENSION
TARRANT COUNTY



PROTECT YOURSELF AND
YOUR COMMUNITY FROM

COVID-19

TEXAS A&M
AGRILIFE
EXTENSION



Stay home when you are sick. Plus, stay home for at least 24 hours of no fever without fever-reducing medications.



Cover your coughs and sneezes. Use a tissue, or cough or sneeze into your sleeve at the elbow.



Disinfect. Use a household spray or wipe to disinfect surfaces and objects that are frequently touched.



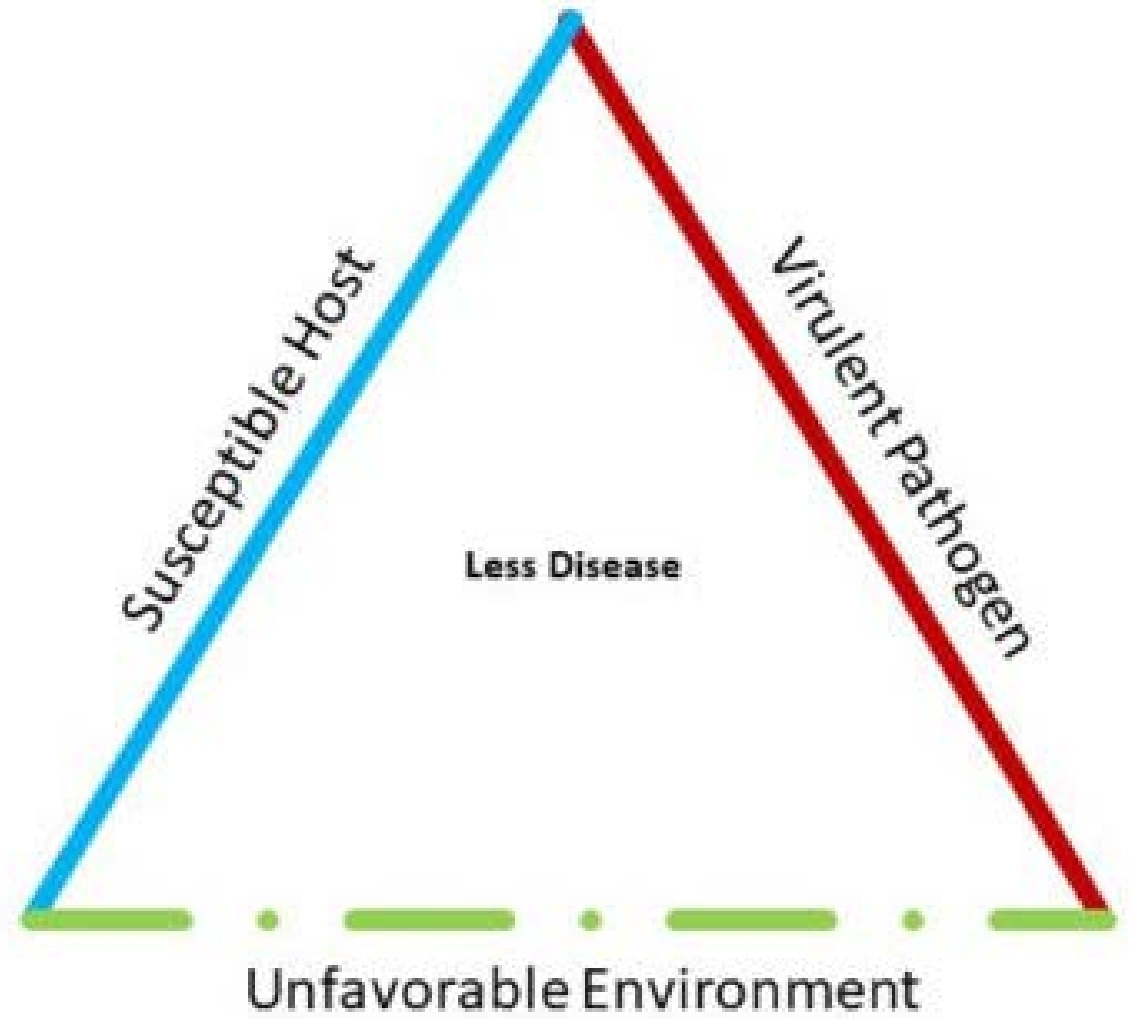
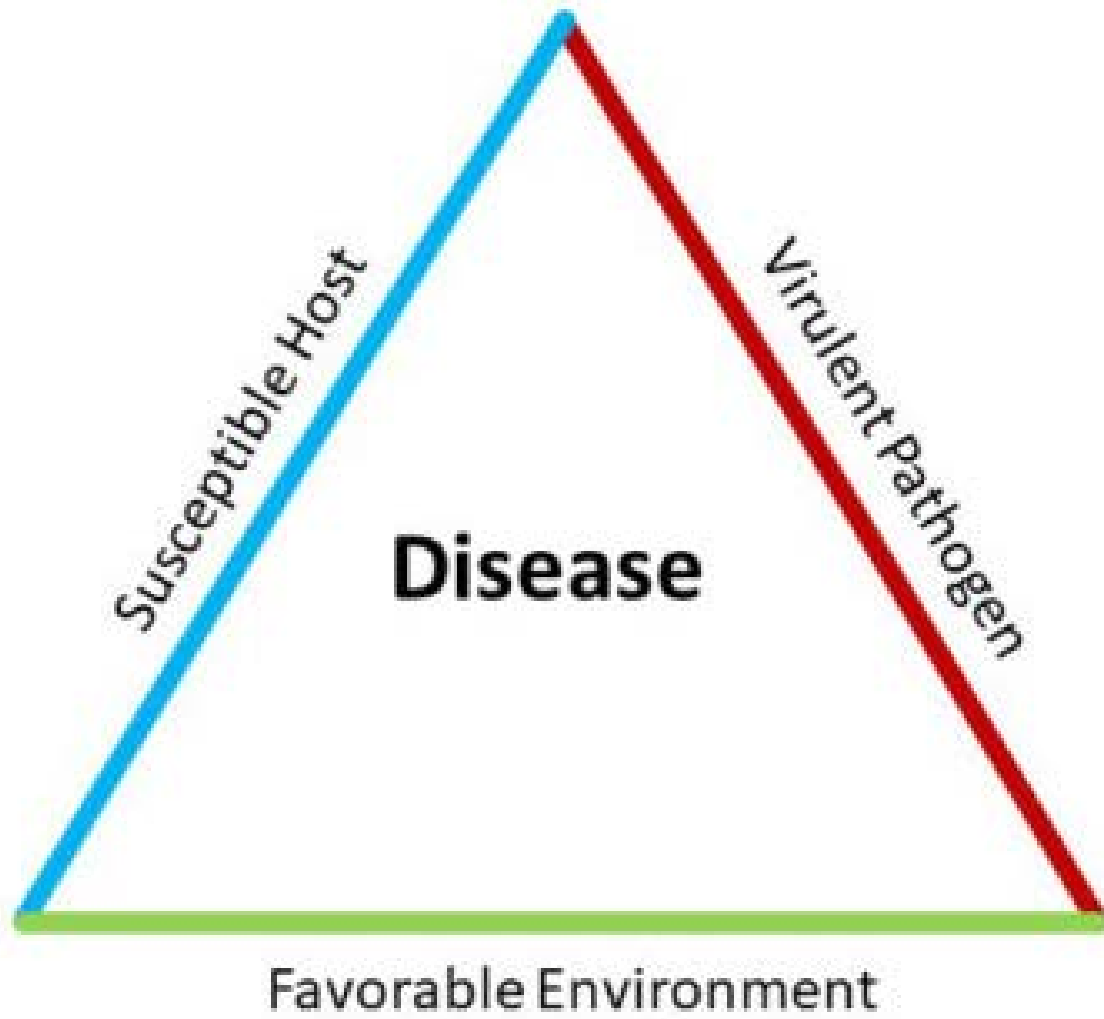
Wash your hands. Scrub with soap and water for at least 20 seconds after you cough, sneeze or blow your nose; touch food, feed or animals; or use the restroom.

Resources

<https://www.cdc.gov/>

<https://dshs.texas.gov/>

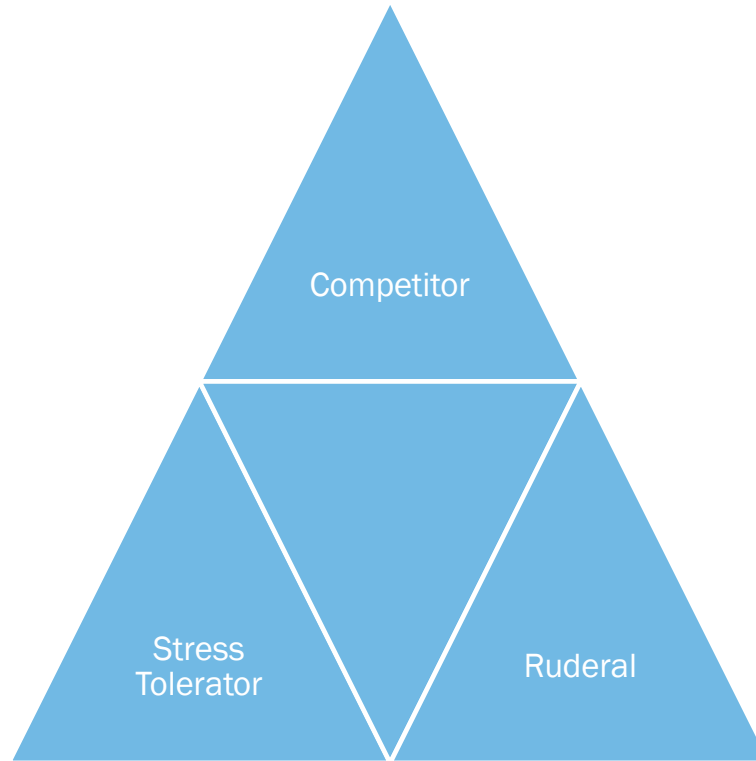
<https://texashelp.tamu.edu/>



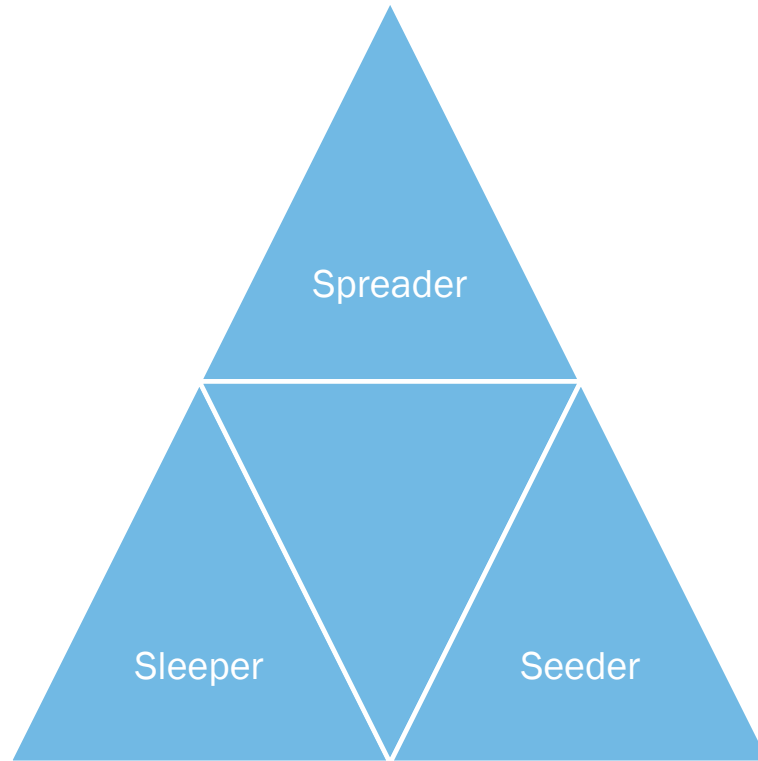
- “(in addition to disturbance) plant populations tend to experience consistent selective pressures from physiological stress (ex: water, nutrient and light availability)”

J. PHILIP GRIME (PLANT STRATEGIES AND VEGETATION PROCESSES, 1979)

GRIME'S TRIANGLE AKA THE C-R-S MODEL

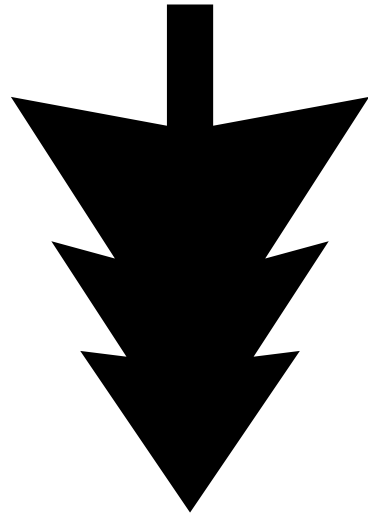


GRIME'S TRIANGLE SIMPLIFIED

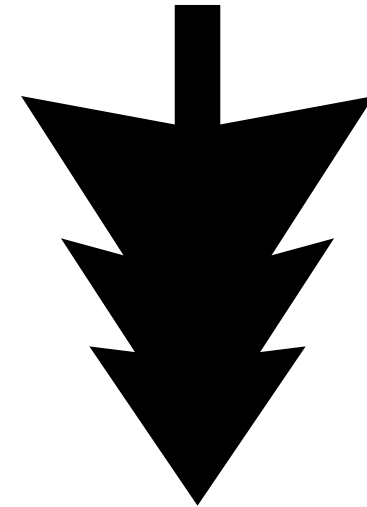


WHO WINS?

Stress

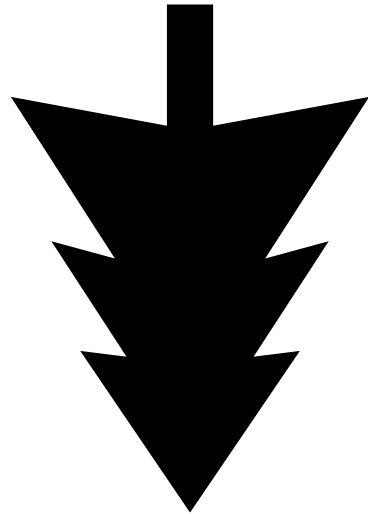


Disturbance

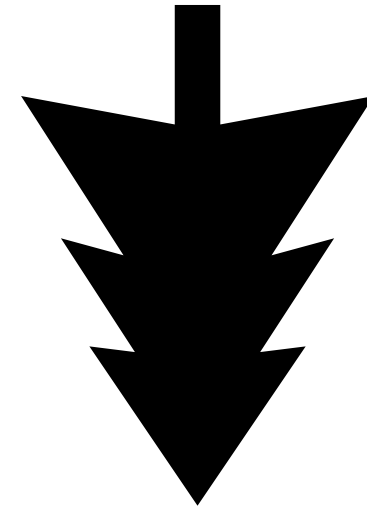


COMPETITIVE ABILITY FAVORED

Stress



Disturbance

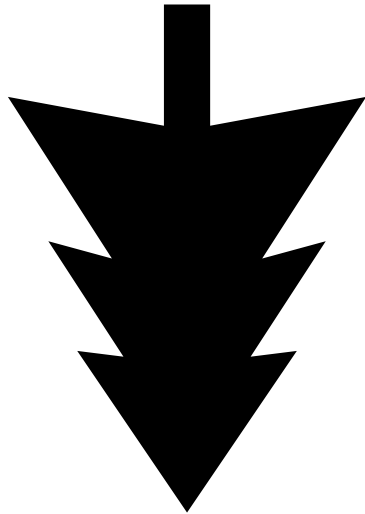


WHAT'S THE COMPETITIVE ADVANTAGE?



WHO WINS?

Stress

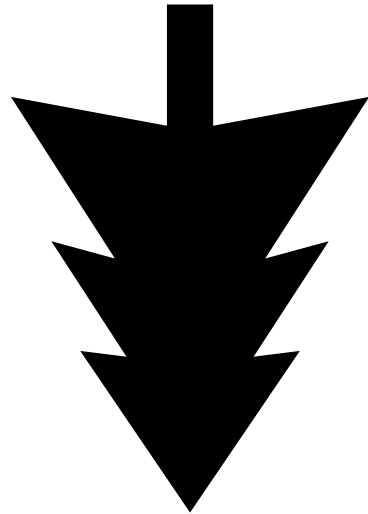


Disturbance



RUDERAL ABILITY FAVORED

Stress



Disturbance



WHAT'S THE RUDERAL ADVANTAGE?

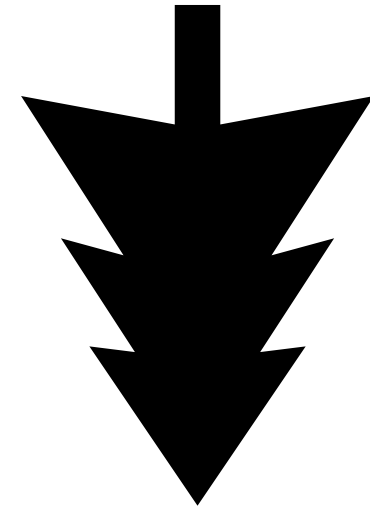


WHO WINS?

Stress



Disturbance

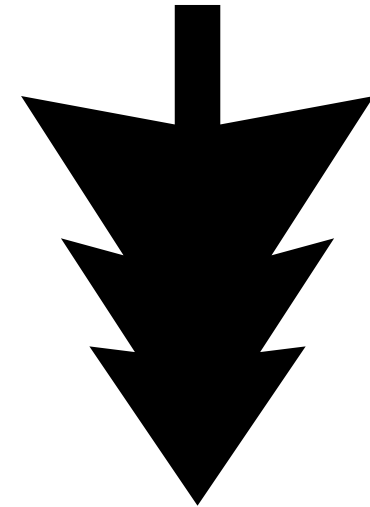


STRESS TOLERANCE FAVORED

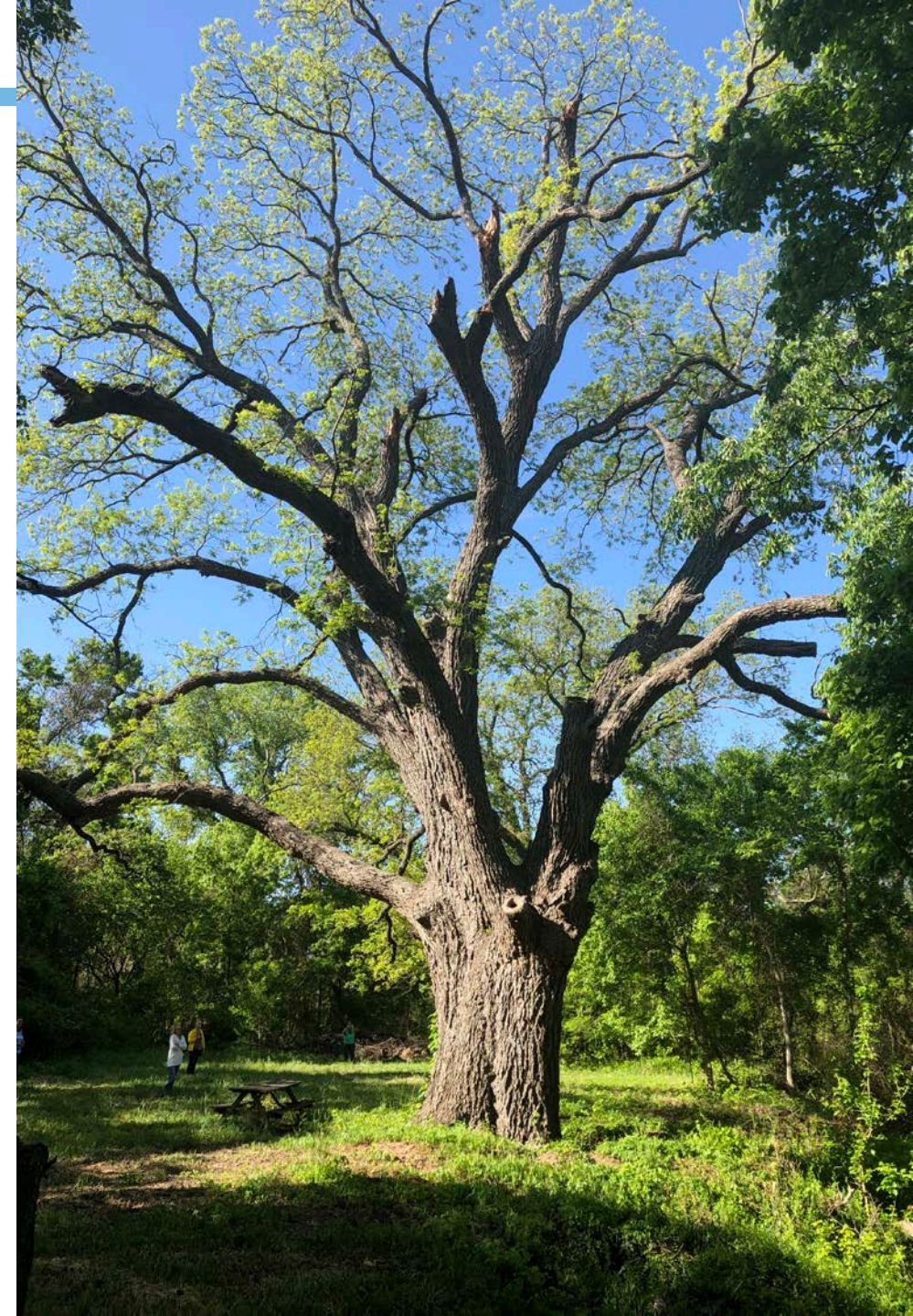
Stress



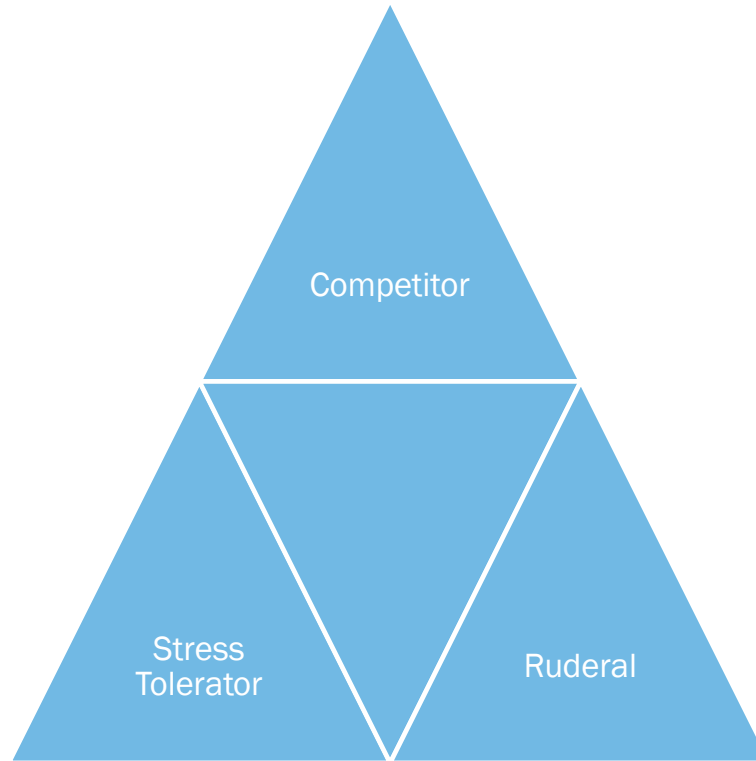
Disturbance



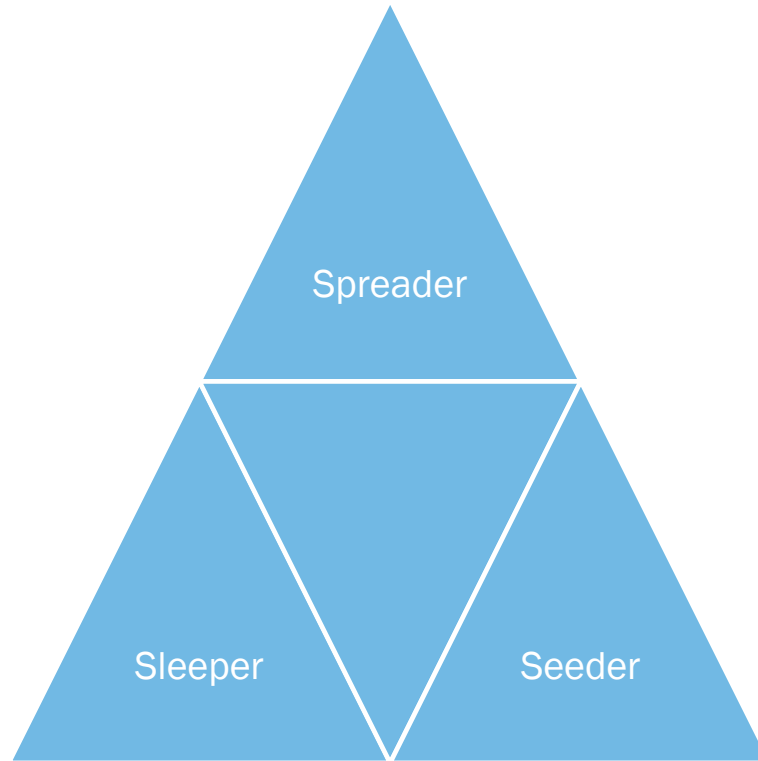
WHAT'S THE STRESS TOLERANCE ADVANTAGE?



GRIME'S TRIANGLE AKA THE C-R-S MODEL

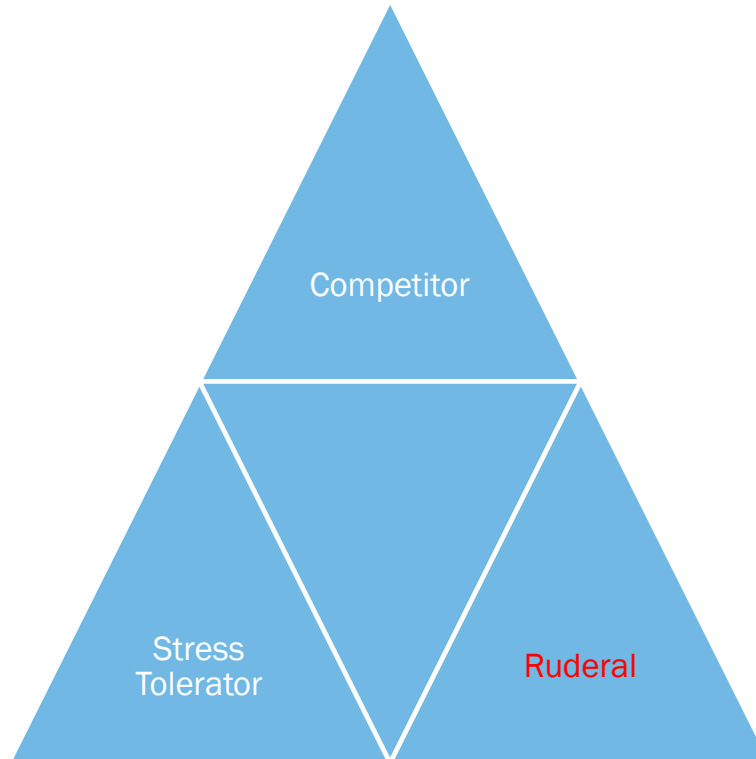


GRIME'S TRIANGLE SIMPLIFIED



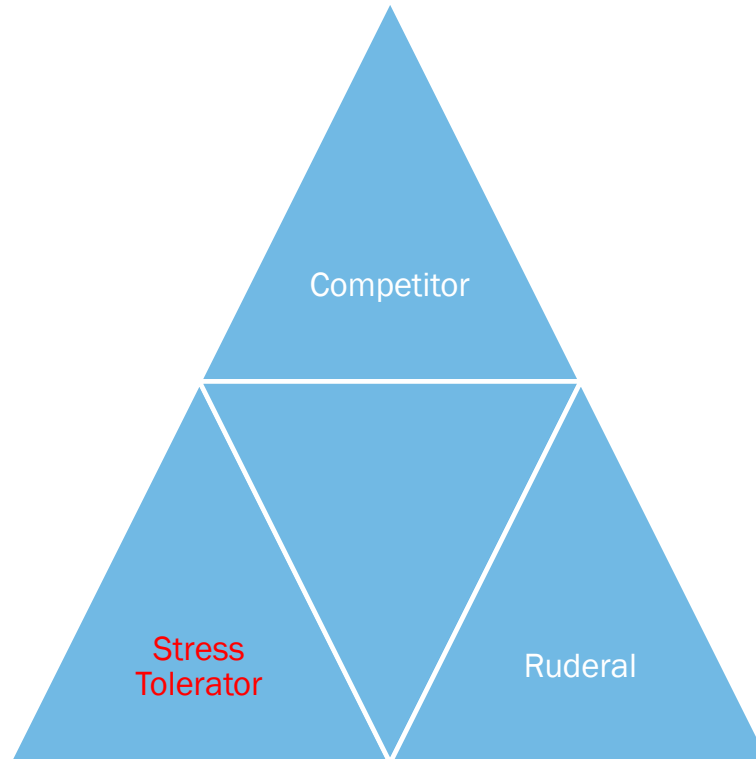


GRIME'S TRIANGLE AKA THE C-R-S MODEL



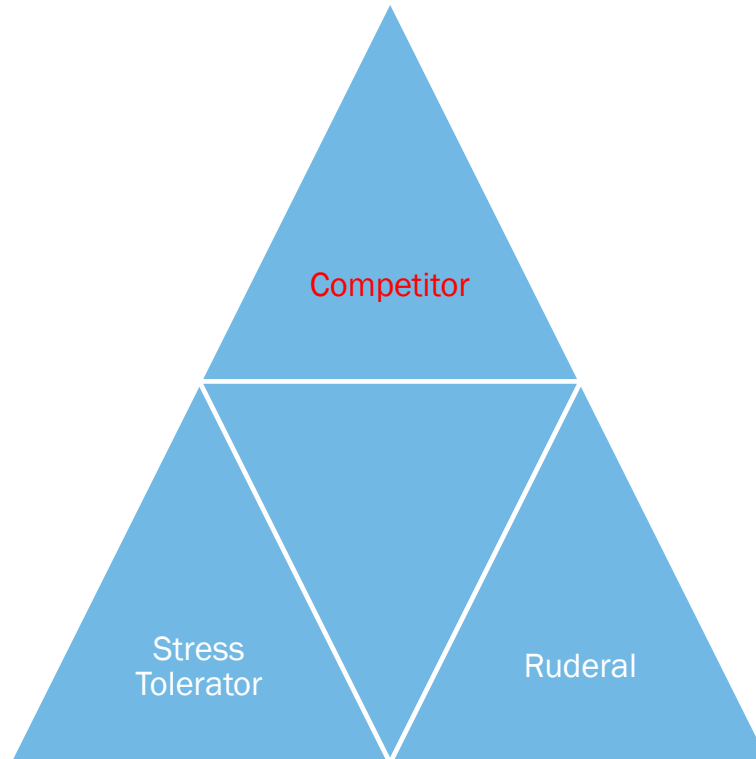


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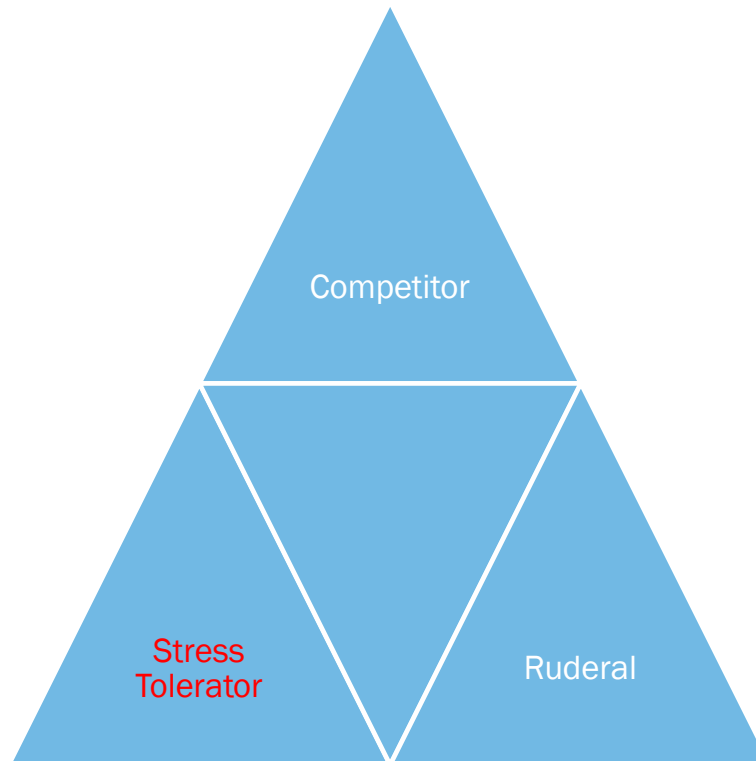




GRIME'S TRIANGLE AKA THE C-R-S MODEL



GRIME'S TRIANGLE AKA THE C-R-S MODEL



Drought Adaptations

Extensive Root Systems



*Honey
Mesquite*



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Root Depth: up to 15'
Root Length: up to 50'

Leaf Shedding/ Early Dormancy



Sycamore

Drought Adaptations

Waxy Leaves



Yaupon Holly

Protective coating limits moisture loss to the air

Pubescent Leaves



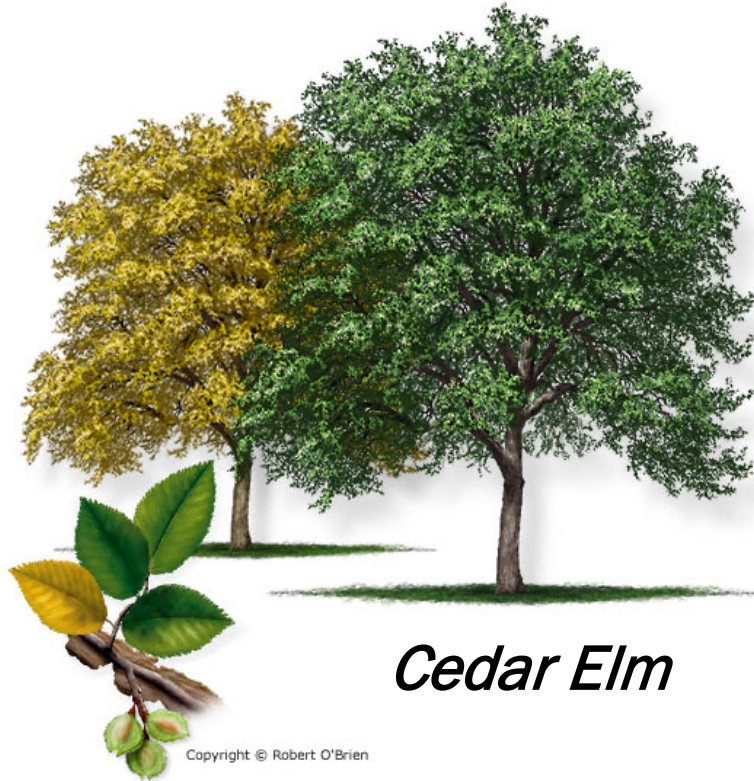
Gum Bully

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Hairs trap an insulating layer of moist air near leaf surface

Drought Adaptations

Small Leaves

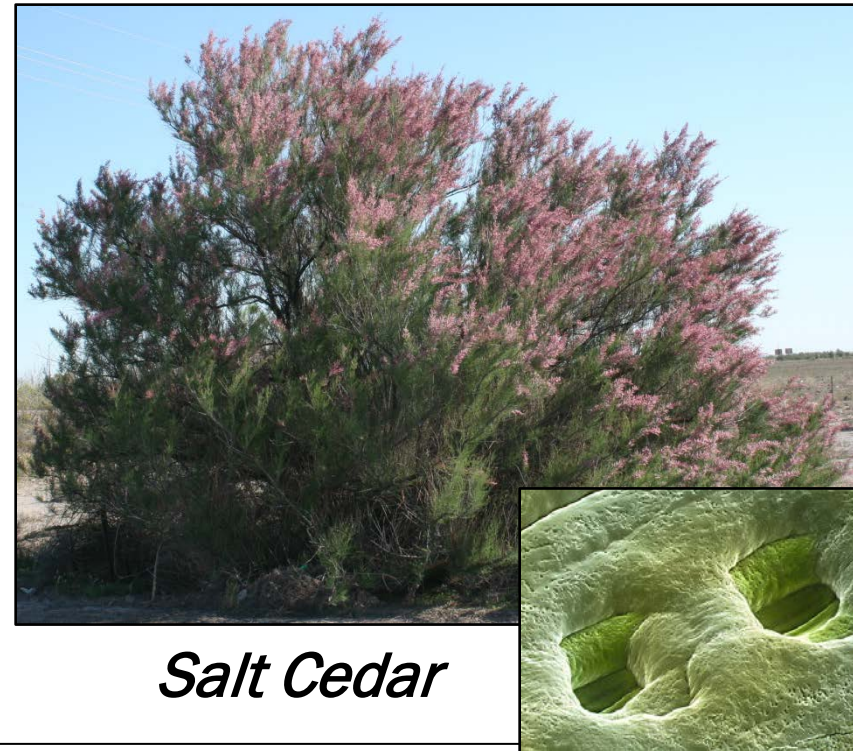


Cedar Elm

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Less leaf surface area to transpire

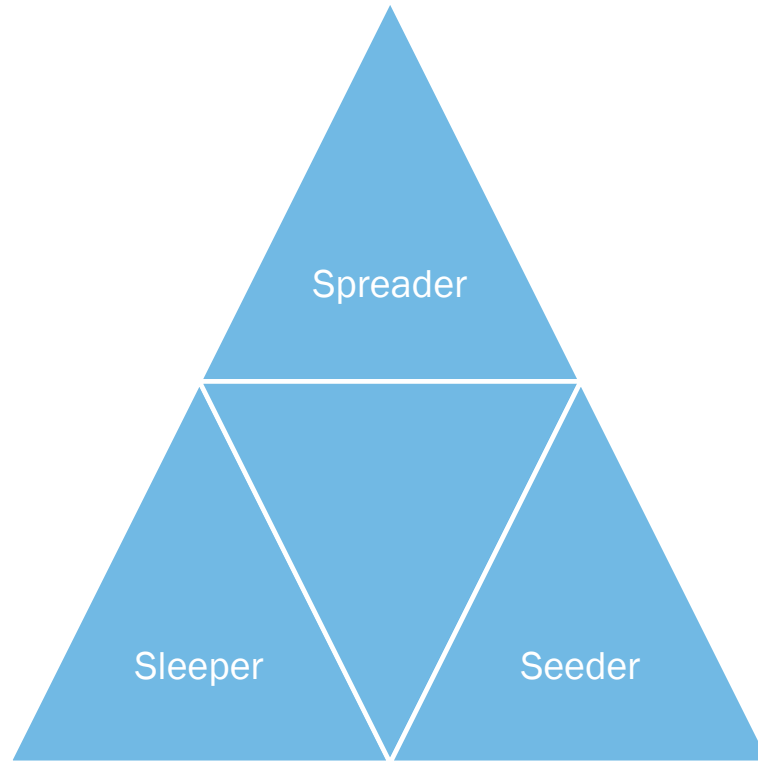
Sunken Stomata



Salt Cedar

Water escaping during transpiration may remain in the depression & be reabsorbed by the leaf

GRIME'S TRIANGLE SIMPLIFIED





QUESTIONS?

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