



DEER-RESISTANT and Co-Existent LANDSCAPES

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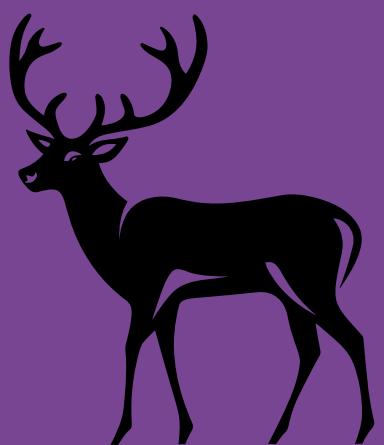


WHY GLOVER?

Serving Retail, Wholesale & Design
customers from all areas of
Northern Utah



Proffering advice on
established & new
landscapes affected
by deer



Paul Mulder
Sales Team Manager



Glover Nursery
West Jordan, UT

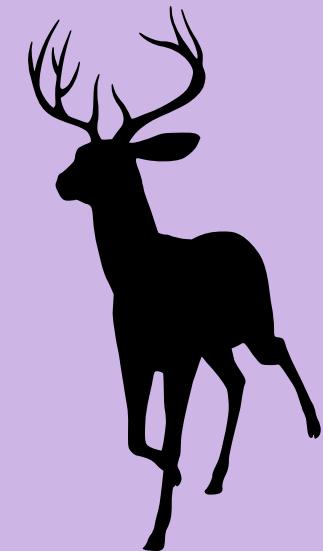


Not a
Wildlife
Biologist !





OVERVIEW



1. DEER EATING HABITS
2. PROTECT EXISTING PLANTS
3. DEER-RESISTANT DESIGN

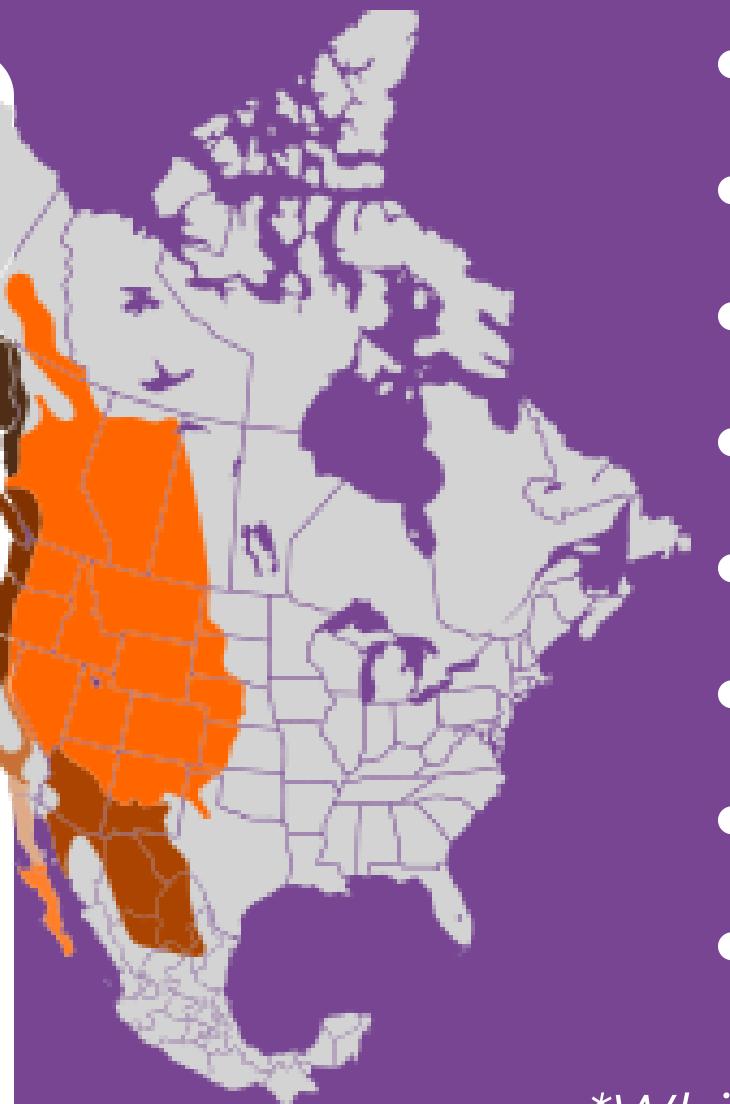
DEER EATING HABITS

Who's eating my plants?

Who's eating my plants?

ROCKY MOUNTAIN MULE DEER

Odocoileus hemionus



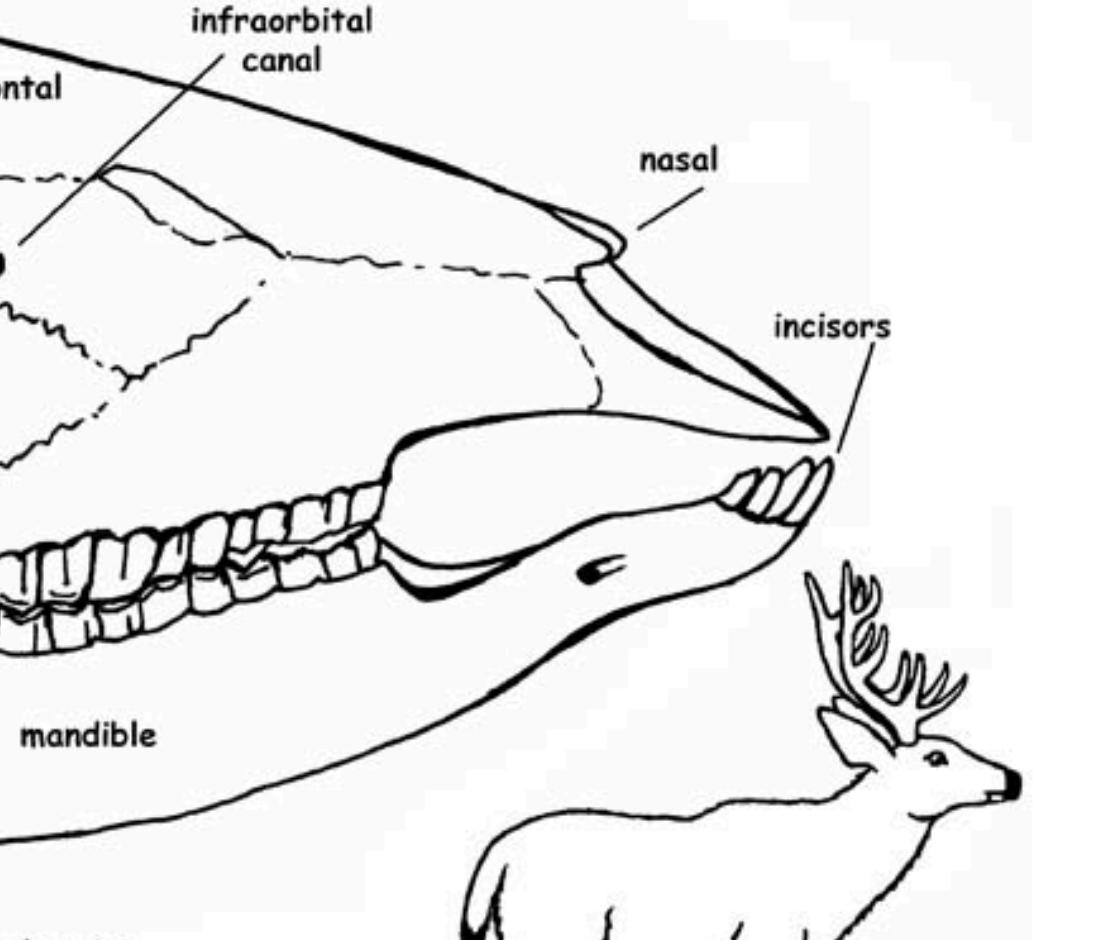
- Utah's only Deer species*
- Common statewide
- Extant since the last Ice Age
- Migrate seasonally
- Occupy many types of habitats
- Lifespan: 9 - 11 years in the wild
- Bucks: 120-300 lbs; Does: 95-200 lbs
- 4.5' tall & 6.5' long

*White-tailed Deer (*O. virginianus*) are non-native and very rarely occur in Utah.



DEER EATING HABITS: HOW RUMINATION & DIGESTION

- Specialized digestive system with four-part stomachs & gut bacteria
- Food is fermented & rechewed before digestion & nutrient absorption
- Enables adjustment to new seasonal food sources & maximal nutrition



DEER EATING HABITS: HOW TEARING & STRIPPING

- Mule Deer lack upper front teeth, only a fleshy palate & lower incisors
- Their tongues are soft & wide & their lips are long & pliant
- With these, they can maneuver leaves & twigs but must tear/strip instead of neatly clipping vegetation



DEER EATING HABITS: WHAT INTERMEDIATE FEEDERS

- Adapted to **GRAZING** herbaceous plants/flowers (forbs) & grasses & **BROWSING** woody trees & shrubs
- Feeding behavior shifts based on plant/nutrient availability throughout the year



DEER EATING HABITS: WHEN

SPRING - SUMMER

- Diet consists of FORBS, GRASSES & other HERBACEOUS plant material
- Deer move from LOWER to HIGHER elevations as the weather warms, the snow melts & elevations start the annual 'green up'



DEER EATING HABITS: WHEN

FALL - WINTER

- Diet shifts to LEAVES, TWIGS & BARK on woody shrubs as grasses & forbs dry out in early Fall
- Deer move down from HIGHER to LOWER elevations in search of easier browse



DEER EATING HABITS: WHEN

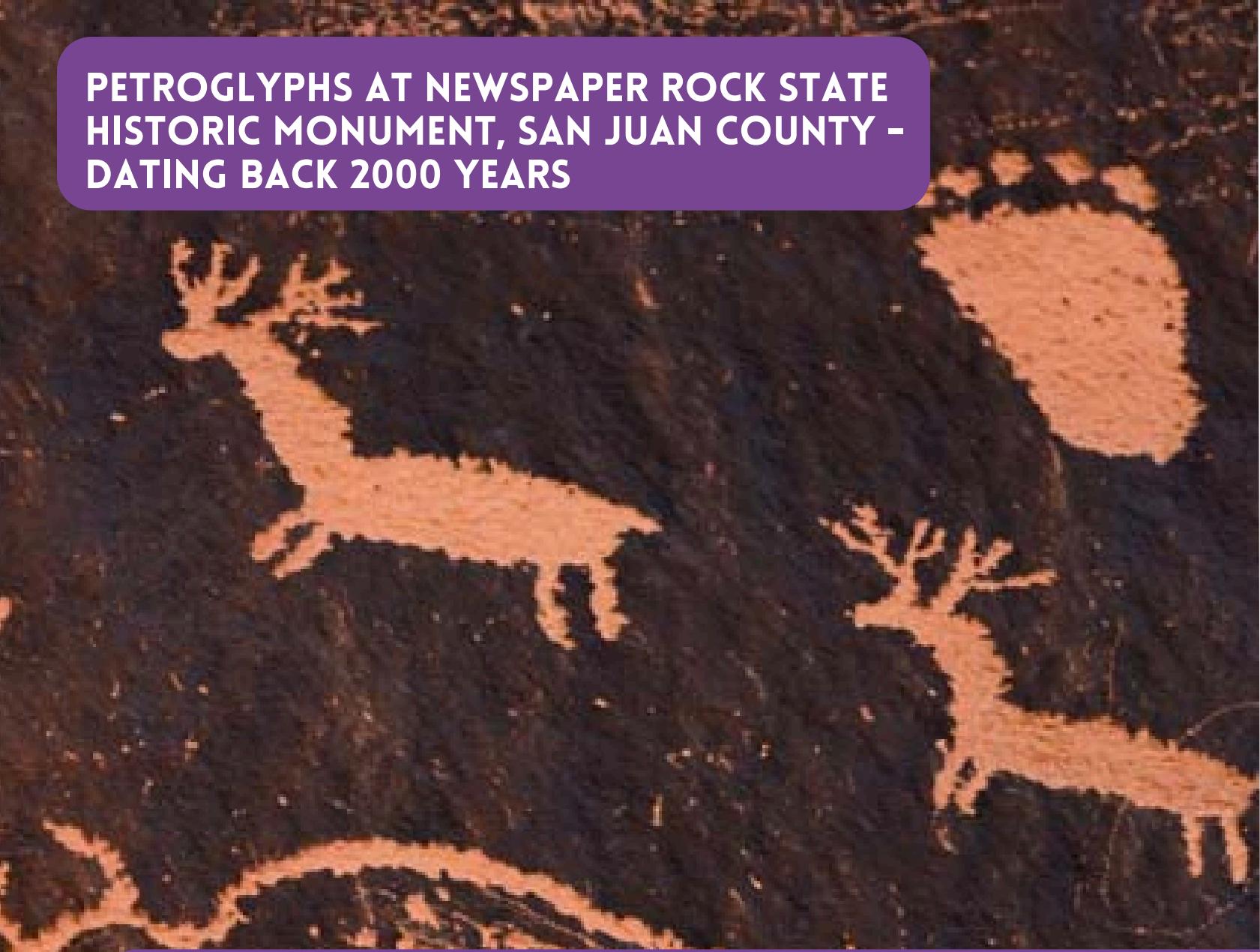
CREPUSCULAR FEEDERS

- Mule Deer prefer to graze & browse during TWILIGHT hours at DUSK & just before & after DAWN
- Typically rest in the middle of the night & during the day in brush for safety
- Might opportunistically feed nocturnally or diurnally

So why are Deer in MY backyard?



PETROGLYPHS AT NEWSPAPER ROCK STATE HISTORIC MONUMENT, SAN JUAN COUNTY - DATING BACK 2000 YEARS



Mule deer populations were originally limited to narrow brushy areas between the formerly dense forest above the benches and the widespread prairie grassland below in our valleys

WHERE THEY WERE

DEER IN MOUNTAIN HOME, 1879, ALBERT BIERSTADT



IS WHERE WE ARE NOW



SALT LAKE CITY CEMETARY



SLC EAST BENCH



PARK CITY



SUNCREST

GLOVER
NURSERY



BUT WHY DO DEER EAT MY LANDSCAPE PLANTS?

ENVIRONMENTAL DRIVERS

- Initial heavy SNOWFALL in lower and mid-range elevations force deer to move
- Available browsing sources have been EXHAUSTED and/or nutritionally depleted
- Your PROXIMITY to daytime cover areas (brushy draws, Juniper patches, Gambel Oak stands)



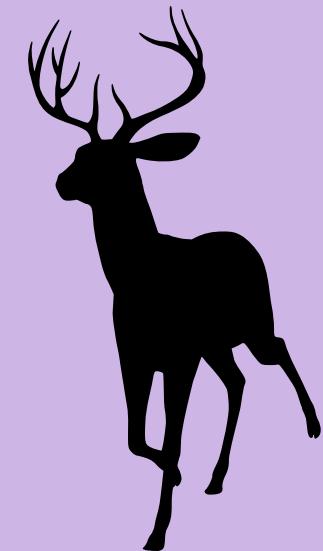
BUT WHY DO DEER EAT MY LANDSCAPE PLANTS?

HUMAN RELATED DRIVERS

- Typical browsing areas are INTERRUPTED by development & construction
- They are being FED nearby & are drawn to your area
- HUMAN-planted landscapes provide unique & irresistible alternatives



OVERVIEW



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How to Deter Deer and **PROTECT EXISTING PLANTS**



DEER DETERRENTS



Scare Deer away from your property



LIGHTS



NOISE



SMELL



DOGS



MOTION

MIORGANITE



PROTECT YOUR PLANTS



Create Physical Barriers / Fencing



STOCKADE FENCE



PLASTIC MESH



WIRE MESH/LINK



ELECTRIC FENCE

At least 8' tall & down to the soil line

PROTECT YOUR PLANTS

Prevent Browsing Damage



Wrap Evergreens
in Burlap through
the Winter



PROTECT YOUR PLANTS

Prevent Trunk Damage



METAL BARRIER



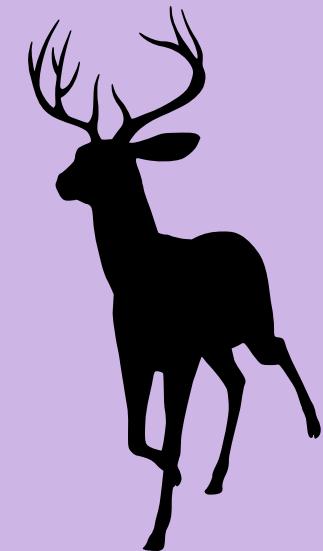
TRUNK GUARD



MESH GUARD



OVERVIEW



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DEER-RESISTANT DESIGN STRATEGIES



DEER SNACKS

TREES

- Aspen
- Arborvitae
- Chokecherry
- Crabapples
- Spur Fruits
- Stone Fruits
- Honey Locust
- Oaks (Acorns)



SHRUBS

- Berries
- English Ivy
- Euonymus
- Laurel
- Photinia
- Roses
- Smooth Hydrangea
- Yews

PERENNIALS & ANNUALS

- Daylillies
- Hostas
- Impatiens
- Liriope
- Pansies
- Sunflowers
- Tulips
- Vegetables

SO WHAT DOES “DEER-RESISTANT” PLANT SELECTION REALLY MEAN?



Deer do not prefer these plants, but may still try them or eat as a last resort.



Deer may browse these plants but they typically recover during the growing season.

4 TYPES OF PLANTS DEER AVOID

1.

Strong
Scents



2.

Rough
Foliage



3.

Poisons/
Toxins



4.

Fine
Texture



PLANTS
WITH

1. Strong Scents



SHRUBS

- Bluebeard
- Boxwood
- Buddleia
- Daphne
- Sumac

PERENNIALS

- Agastache
- Alliums
- Baptisia
- Bee Balm
- Catmint
- Germanander
- Lamium
- Lavender
- Monardella
- Peonies
- Oregano
- Rosemary
- Russian Sage
- Salviyas
- Tanacetum
- Thyme
- Yarrow
- Zauschneria



Rough/
Fuzzy
Texture

2.



SUCCULENTS

- Agave
- Hesperaloe
- Yucca

PERENNIALS

- Brunnera
- Coneflower
- Gaillardia
- Globe Thistle
- Heuchera
- Lamb's Ear
- Lamium
- Ligularia
- Poppies
- Rudbeckia
- Sea Holly

SHRUBS

- Buddleia
- Holly
- Oregon Grape
- Juniper-Pfitzer
- Potentilla
- Privet
- Spiraea
- Viburnum

3. Poisonous/ Irritating

SHRUBS

- Coralberry
- Elderberry
- Snowberry
- Wisteria

PERENNIALS

- Bleeding Heart
- Columbine
- Daffodils
- Euphorbia
- Foxglove
- Hellebore
- Hyacinth
- Iris
- Lungwort
- Mahonia
- Milkweed
- Monkshood
- Peonies
- Poppies



Finely
Textured

4.



PERENNIALS

- Amsonia
- Clematis
- Coreopsis
- Dianthus
- Ferns
- Kniphofia
- Ornamental Sedges
- Veronica
- Vinca

SHRUBS

- Barberry
- Boxwood
- Broom
- Buckthorn
- Deutzia



CONIFERS

PREFERRED

- Arborvitae - Emerald Green
- Douglas Fir
- Fir - Subalpine, White
- Juniper - Rocky Mountain
- Pines - Austrian, Mugo, Scots

BROWSED

- Arborvitae - Green Giant
- Cedars - Blue Atlas, Deodar, Libani
- Leyland Cypress
- Pines - Limber, Pinyon, Ponderosa
- Spruces - Alberta, Norway, White

NOT PREFERRED

- Alaskan Cedar
- Arizona Cypress
- Giant Sequoia
- Incense Cedar
- Junipers - Chinensis & Virginiana
- Pines - Bristlecone, Japanese Black
- Spruces - Blue, Engelmann

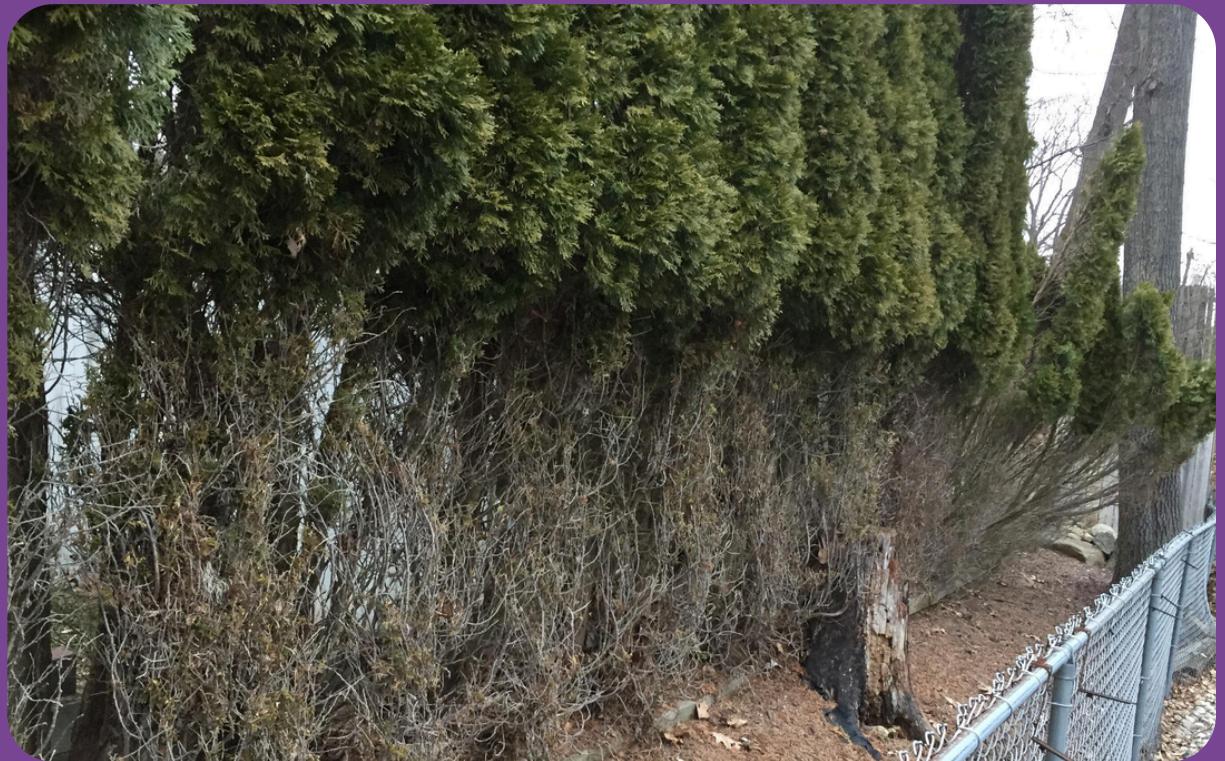


LIMITS OF TRADITIONAL DESIGNS

LAWN + PLANT BEDS

- Easy access like a **BUFFET** line
- High fertilizer use increases the **NUTRIENT** value of foliage/flowers
- Rows of single species mono-plantings are easily & catastrophically **DAMAGED** when browsed

DEER-RESISTANT DESIGNS



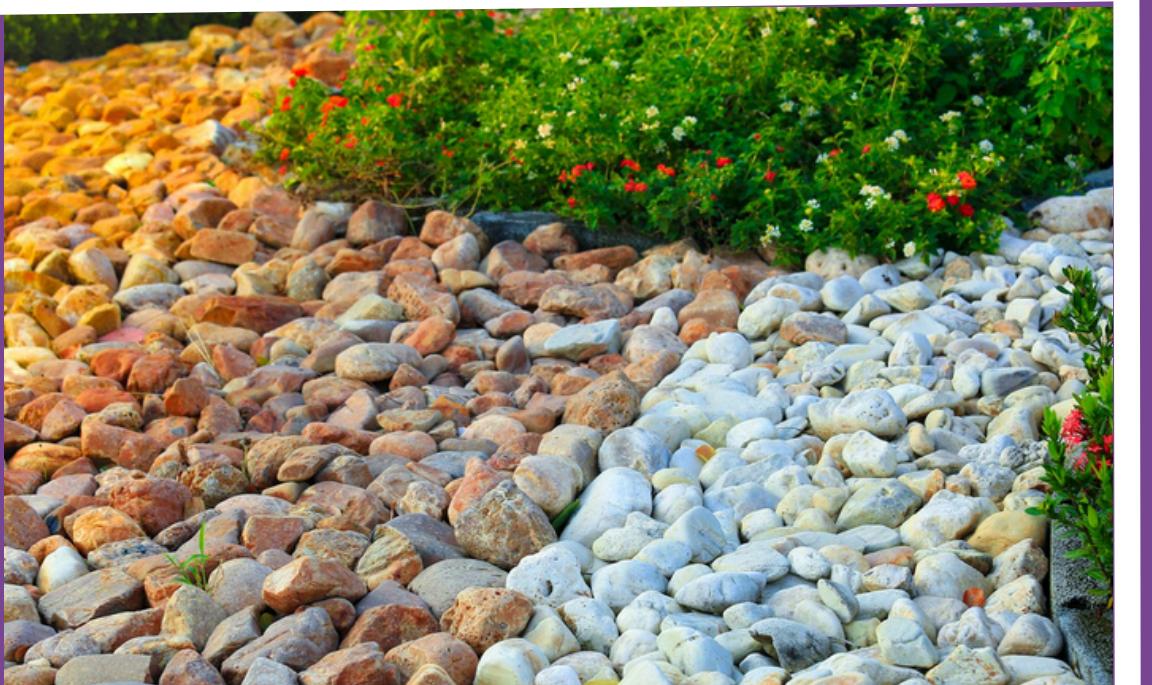
No to Single cultivars

- More noticeable when browsed
- More costly to replace



YES to Mixed species

- Less noticeable when browsed
- Less costly to replace individual plants



DEER-RESISTANT DESIGNS

BORDER DETERRENTS

- Utilize deterrent & resistant plants as borders around more sensitive plants - Spring Daffodils & Summer Mints, Agastache, Salvias, Grasses & Sumacs
- Create barriers to beds of sensitive plant material with wide swaths of large cobble - UDOT





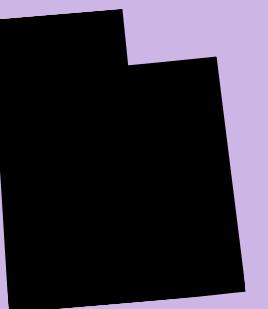
DEER-RESISTANT DESIGNS

HARDSCAPES VS SPECIMENS

- Browse damage on precious specimen plants can defeat the purpose
- Instead, consider utilizing hardscape elements as alternate focal points
- Provide structure & balance without relying solely on plants

Many native plants are ecologically adapted to annual browsing, either moderate or heavy





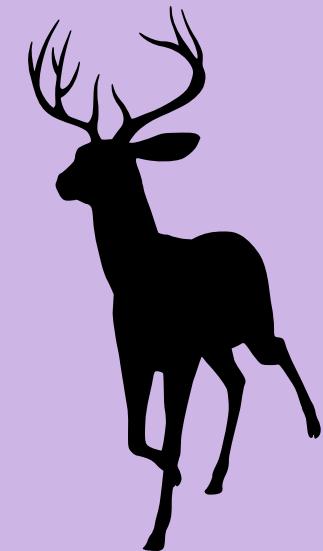
Native Plants

Plants that recover
quickly in the Spring...

- Apache Plume
- Bitterbrush
- Chokecherry
- Cliffrose
- Dogwood
- Elderberry
- Gambel Oak
- Golden Currant
- Black Hawthorn
- Oregon Grape
- Potentilla
- *Prunus besseyi*
- Rabbitbrush
- Rose - Wood's
- Sagebrush
- Serviceberry
- Sumac
- Willow



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HOW TO SPEAK 'DEER' TO CLIENTS

- Deer can & will eat ANYTHING
 - The best offense is defense
- Plants are "DEER-RESISTANT" until demonstrated otherwise
 - Plant lists are ANECDOTAL & often CONTRADICTORY



HOW TO SPEAK 'DEER' TO CLIENTS

- Deer may eat a certain plant in one area & leave it alone in another
- Deer tastes vary by individual, by herd, by region, by season, and by the availability (or lack) of more appealing options.





Thank you!



SOURCES

- ‘Deerproofing Your Yard & Garden’ - Rhonda Massingham Hart , 2005
- ‘Deer Resistant Plants’ - Glover Nursery, 2024
- ‘Landscape Plants Rated by Deer Resistance’ - Rutgers University Agricultural Extension , 2003
- ‘Minimizing Browsing Damage from Deer: Landscape Planning for Wildlife’ - Utah Division of Wildlife Resources (UDWR), 1988
- ‘Mule Deer and Black-tailed Deer Facts’ - Mule Deer Foundation (MDF), 2021
- ‘Mule Deer: Changing Landscapes, Changing Perspectives’ - Western Association of Fish & Wildlife Agencies (WAFWA), 2006
- ‘Preventing Deer Damage to Your Trees and Shrubs’ - Utah State Extension (USU), 2013