Desert Dwellers

Recreating our local ecosystem.

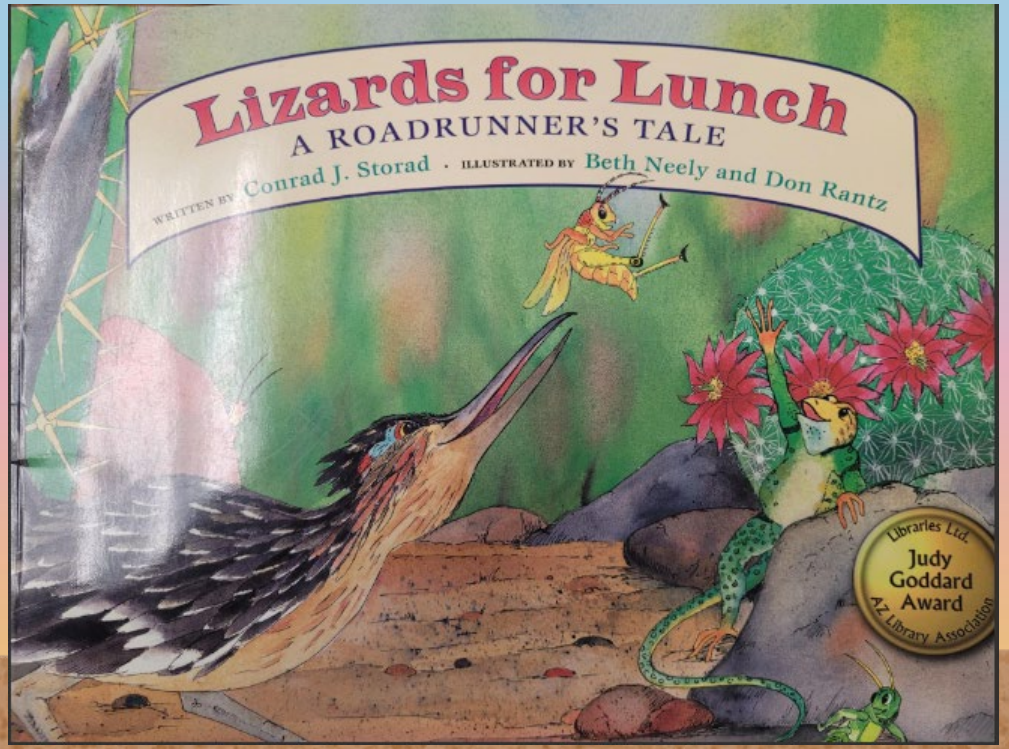
Get thinking…

On your whiteboards

Why is it important to know about food webs or food pyramids?

6.L2U1.14 students will construct a model that shows the cycling of matter and flow of energy in ecosystems.
You will do this by completing an information card on your desert dweller and link it with the other energy roles in the ecosystem.

Let's learn more about one of our local desert dwellers



Lizards for Lunch A Roadrunner's Tale by Conrad Storad

Learn more about your desert dweller.

Research information about your desert dweller.

Draw a picture of your desert dweller.

Include their predators and prey.

Include important adaptations.

Features it has to survive.

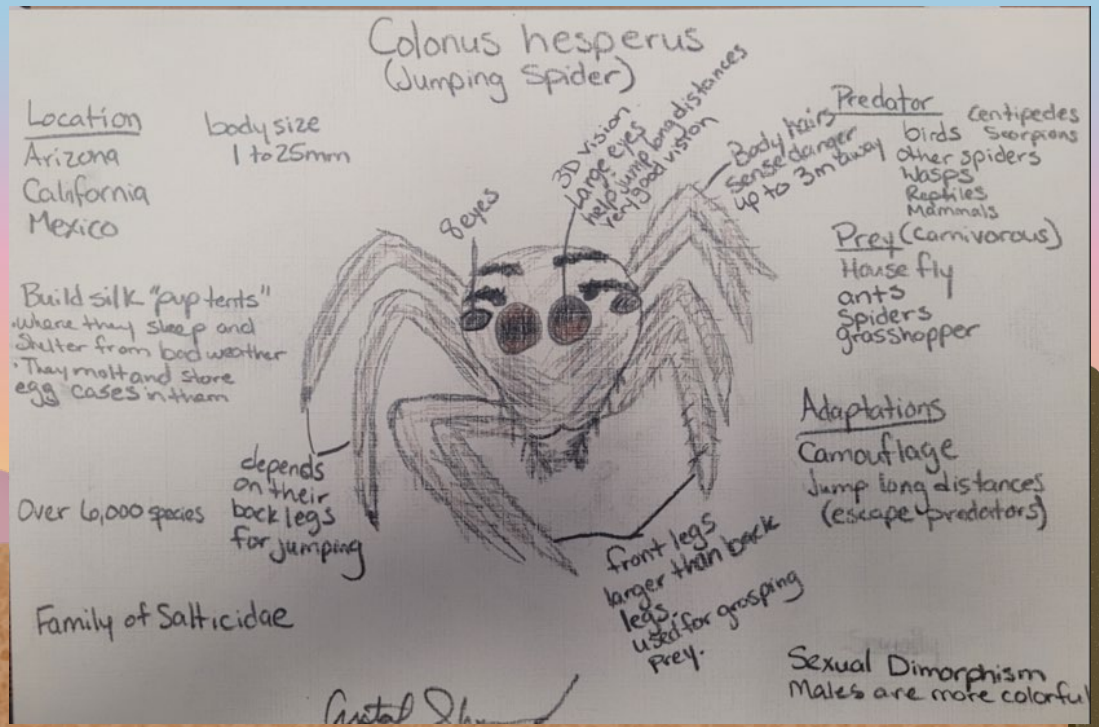
Unique traits or features.

Their location and typical shelter

Include as much information you can about your dweller.

What do we do??

Animal Food Web Research on Google Classroom. There will be a link to National Geographic and iNaturalist to do your research.



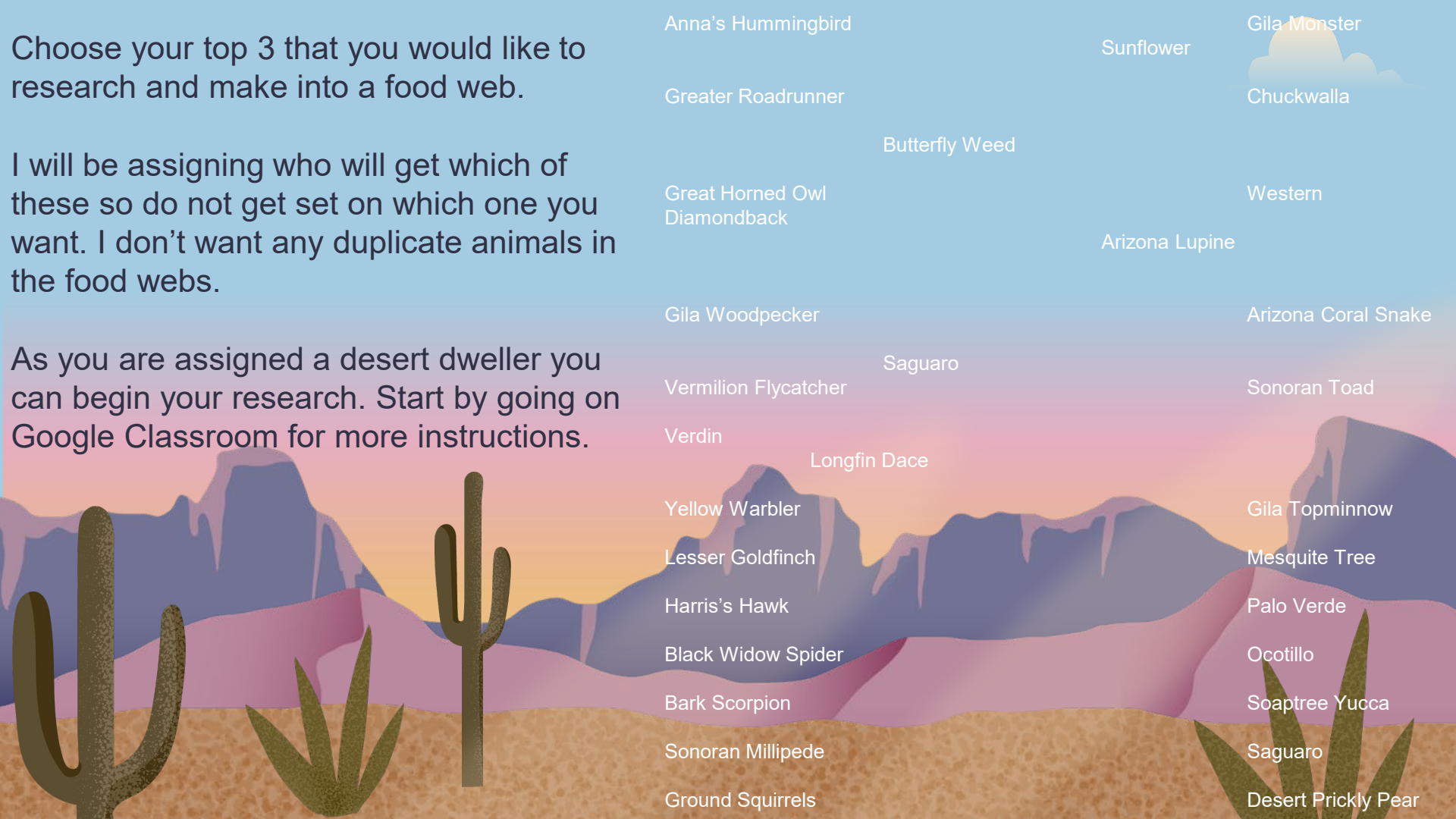
The rubric is how you will be graded on this project.

	Excellent 5	Good 4	Fair 3	Needs Improvement 2	Inadequate 1
Predators and Prey	Accurately includes both predators and prey with detailed, realistic illustrations and clear explanations.	Includes both predators and prey with good illustrations and explanations.	Includes both predators and prey, but with some inaccuracies or missing details.	Includes one or neither predator nor prey with minimal details.	Fails to include predators or prey.
Adaptations	Clearly and accurately depicts important adaptations with detailed explanations that show a strong understanding.	Depicts most adaptations accurately with good explanations.	Depicts some adaptations with basic explanations, but lacks detail or clarity.	Includes limited adaptations with unclear or incomplete explanations.	Fails to include or accurately depict important adaptations.
Survival Features	Shows a comprehensive range of survival features with detailed, accurate illustrations and explanations.	Shows most survival features with good illustrations and explanations.	Includes some survival features but with limited detail or clarity.	Shows few survival features with minimal explanations.	Fails to include or clearly explain survival features.
Unique Traits	Presents unique traits with creative, detailed illustrations and thorough explanations that enhance understanding.	Presents unique traits with good illustrations and explanations.	Includes some unique traits, but with limited detail or creativity.	Shows a few unique traits with minimal explanations.	Fails to include or identify unique traits.
Location and Shelter	Accurately depicts the desert dweller's location and typical shelter with detailed illustrations and clear explanations.	Depicts location and shelter with good illustrations and explanations.	Includes location and shelter, but with some inaccuracies or missing details.	Shows limited information about location and shelter with minimal explanations.	Fails to accurately depict location and shelter.
Information Completeness	Provides a thorough, detailed description including all required elements with clarity and accuracy.	Provides a detailed description with most required elements covered.	Provides a basic description but with some missing elements or details.	Provides a limited description with several missing elements.	Provides an incomplete description with most required elements missing.
Total Score:	/30				

Choose your top 3 that you would like to research and make into a food web.

I will be assigning who will get which of these so do not get set on which one you want. I don't want any duplicate animals in the food webs.

As you are assigned a desert dweller you can begin your research. Start by going on Google Classroom for more instructions.



Closing

What type of energy role does your desert dweller have?

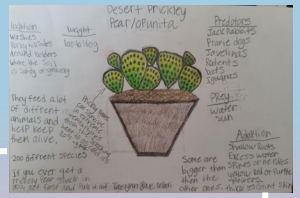
Rubric for Desert Dweller Activity

Extension Activity

Making a Food Web

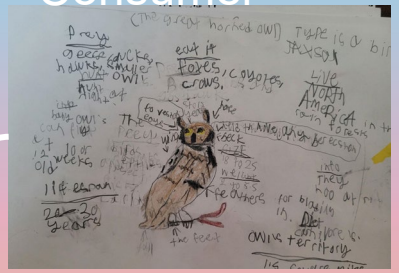
Decomposer

Producer



Primary Consumer

Secondary Consumer



Put it all together in a food web. Take yarn and link the different energy sources in our ecosystem.

Owl Pellet Dissection

Another idea!
Have students dissecting an owl pellet so they have a hands-on experience with what an owl eats.

Student Examples

Sun flowers can grow 6 feet tall

Name tonnie

insects ,Birds and small mammals are predators to the sun flower

inside a sunflower has thousands of seeds

sun flowers can grow very fast.

Sunflowers don't like hostagor fern

Bees mostly go for sunflowers because there loaded with Pollen

sunflowers love the sun

Sunflowers can help improve soil

Western Diamonback (snake)

Predators

- Eagles
- hawks
- road runners
- king snakes
- coyote
- bobcats
- fox

Food

- chipmunks
- Prairie dogs
- gophers
- ground squirrel
- rabbits
- mice & rats

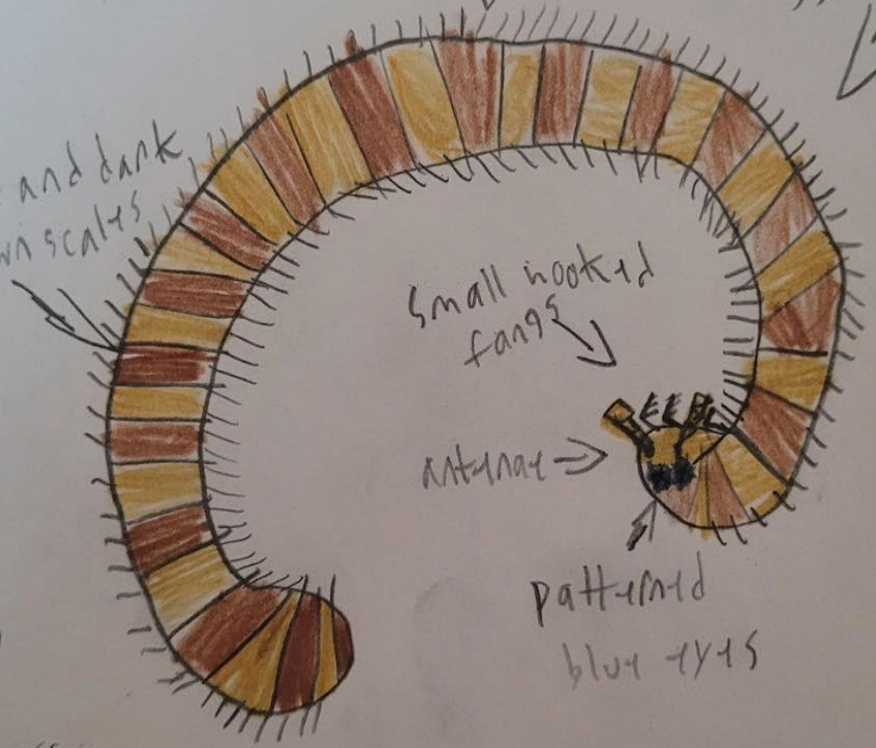
Special feature

Sharp teeth and rattle

Where they live

- Western Texas
- Southern New Mexico and Arizona
- Southern California
- Central Mexico

Sonoran Desert Millipede



Decomposer

Locations:
- Arizona
- Texas
- New Mexico

Prey: Living plants or dead carcasses

Predators: Birds, rodents, ground beetles, ants, and spiders

Ground Squirrel

Fur for protection size and eyes.

Special Feature

Predetors

coyotes
badgers
Hawks
Snakes

Food

Fruits of cholla
Prickley pear
barrel cactice
seeds
mesquite-beans
insects
mice
grass

Live

North Dakota
montana
utah
nevada
pacific north west
South west america

Facts

There tail can move signals to comunitation

Desert Prickley Pear/opunita

location

Washes
Rocky hillsides
Around bolders
where the soil
is sandy or gravelly

Weight

100 to 160g

Predators

Jack Rabbits
Prarie dogs
Javelinas
Rodents
bats
Iguanas

PREY

water
sun

They feed alot of diffrent animals and help keep them alive.

Prickly Pears can survive in extreme temperatures from the heat to as cold as 30°F -34°C

200 diffrent species

If you ever get a prickely pear stuck in

Some are bigger than then the

Adaption

Shallow Roots
Excess water
Spines or needles
yellow Red or Purple flowers.

Invertebrates

Sexual dimorphism

Adult male are half the size of female

Prey

live insects
other spiders
arthropod

Adaptations

Sticky/irregular web

Latrodectus

(Black widow spider)

eight eyes

31 species

Family of Theridiidae

habitat

shady
dark
garages
woodpiles
sheds

venomous
Poison

Carnivore

predators

blue mud dauber species
Chalybion californicum

Location

eastern us
Southern canada south to florida
west/eastern texas
oklahoma
Kansas

Madi King

1.3 inches long; diameter of 0.25 inches

Ocotillo Population

146(2022)

Life Span: 60 years

important adaptyns: its stems are covered in wax which helps reduce water in evapo

Can Be found

across the Chihuahan and sonoran deserts of Texas, New mexico, Arizona, and small part of cali

Scientific name: fouquieria splendens

Hight: 20 feet

features: Long Thin and unbranched spiny stems.

species: 11

Nickname: candelwood, Jimwood, coachwip, vine cactus, flaming sword and Jacobs staff

features to Survive: succulent water-storing stems,

Predators: White-Tail deer, Big horn sheep

insects eat ocitllo: spider mites, scael insects, fungus Gnats, mealybugs, other pests on Radar

ocitllo can Dye By: over watering

butterfly MilkWeed

locations

Maine
south Dakota
Florida
desert sothwest

over 140 species

Predators

oncopeltus fasciatus
butterfly/monarch

what is it on food pyrmid

Very low it is not a consumer wich cases it to have less energe the

eat's

makes owen food

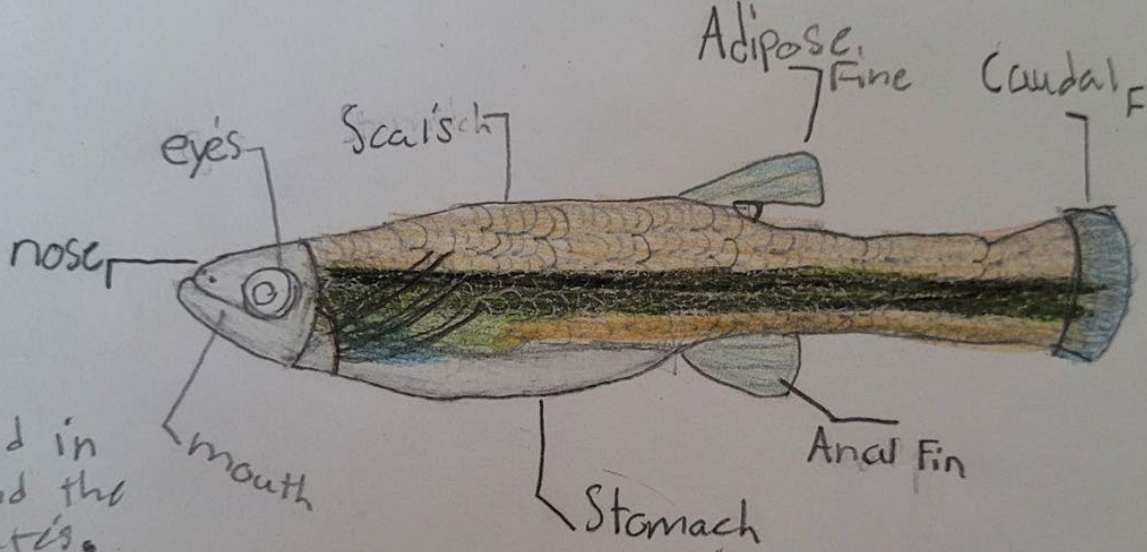
Size

bushy 1½-2 ft
1/4 long
2-5 in across

Briael sanchez

Parts of a gila topminnow.

Attiyah. J. 8/29/24



it is found in mexico and the united states.

gila topminnow is a omnivour but feeds mosty on aquatic insect larvae.

they can eat Detritus, Algea, And aquatic invertebrates. when Available, ~~Gila topminnow are endangerd~~ Due to Mosquitofish.

Both Male's and Female's have a tan to olive colored Body. the intire gila River Basin Below 4000 Feet elevation.

Gila woodpecker

mass
2.3oz

the locth
southeast California
S.W. Nevada
southern Arizona
S.W. New mexico
& central mexico

the predators
bobcats
coyotes
hawks
housecats
snakes
FOX

Long strate chisel beak that is both used and help it eat insects and fruits

males have a red patch in the center of the crown

body size
8-10 inches long
20-25cm

what they eat
insects
small vertebrates
berries

help it camouflage in the desert vegetation and tree bark of its Arizona home

Live in
saguaros
deserts
dry forests

Soaptree Yucca

Growth rate
about 1" (2.5cm) in hight a year.

Benefits
helps stabilize in dune areas

Spread to 25 feet wide with offsets

The Plant hight: 1 to 3 feet
The plant width: 1 to 3 feet

Care
Supplemental water increases it's growth rate

life Span
250 to 300 years.

The best fertilizer for a Yucca is 20-20-20 or 10-30-20 or 19-24-16

(Name of animal)

(Anna's Hummingbird)

(Range)

They are comman year-Round residents in lower elevations of Souther and Central Arizona.

(Wild status)

Currently their range is expanding and their numbers are increasing.

(Habbitat)

Live in Wide variety of habitats, including open woods, grasslands, forestand deserts.

(Predators)

Some of these Predators inclued tree Snakes, Western Scrub-Jays American Kestrels, roadrunners and Curved-billed Thrasher.

(Diet)

These birds feed on nectar from various flowers using a long extine tounge or catch small insects.

(Size)

They are about 4 inches in length and weight 0.10-0.21 ounces.

(Home)

The feamale Humming bird biulds her nest on a wide variety of surfaces, most often on the branch of a shrub or tree

(Adaptations)

In cooler climates they would migrat to warmer Places in search

(Lifespan)