Guideline

Native Plant Identification Competition: Vital Connections

Competition Name: Native Plant Identification

Division: Private Lands

Competition Type: Individual - This is a Live On-Site Competition, meaning you will compete only at the Summit.

- Students register ahead of the Summit.
- ONLY compete on-site at Summit.

Eligibility Levels: Middle 6-8 and Secondary 9th-12th Grade

AGFC Conservation Education Standards:

- **Understanding Arkansas' Fish and Wildlife:** Directly applies to understanding how plants support wildlife.
- **The Importance of Habitat Conservation:** Emphasizes the role of native plants in creating and sustaining habitats.
- **Promoting Responsible Interaction with Natural Spaces:** Encourages careful observation and appreciation of native flora.

Competition Overview:

The overall objective of this competition is to strengthen student knowledge of native plant communities.

Competition Purpose:

Students will be presented with resources before the competition about native plant communities found in Arkansas and why those are crucial to wildlife life cycles. For example: rattlesnake master, milkweed, etc. On-site, students will be presented with a selection of plants (10) from a larger group. Students will identify the plant, then provide an example of a native species that depends on it for their life cycle and why. For example: butterfly milkweed - monarch - host plant for reproduction.

You will showcase your ability to:

- **Identify Native Plants:** Accurately recognize and name native plant species found in Arkansas.
- **Connect Plants to Wildlife:** Provide specific examples of native wildlife that depend on the identified plants.
- **Explain Ecological Relationships:** Articulate *why* a particular native species depends on the plant for its life cycle (e.g., host plant, food source, shelter).
- **Apply Learned Resources:** Utilize knowledge gained from pre-competition resources to solve the identification problems.
- **Perform Under Pressure:** Accurately identify and connect plants within a competition

setting.

Competition Guidelines:

You will compete in teams to identify native plants and explain their ecological significance.

Team Size: Individual

Competition Format:

- **Plant Selection:** On-site, teams will be presented with a selection of approximately 10 native plants. These plants will be either live specimens, high-quality photographs, or preserved samples.
- **Identification Task:** For each plant, teams must:
  1. **Identify the Plant:** Provide the correct common name of the native plant.
  2. **Identify Dependent Species:** Name one specific native wildlife species that depends on that plant.
  3. **Explain the Relationship:** Briefly explain *how* that wildlife species depends on the plant for its life cycle (e.g., "host plant for reproduction," "primary food source," "shelter/nesting material").
- **Response Format:** Teams will record their answers on a provided answer sheet.
- **Time Limit:** A specific time limit will be allocated per plant or per station to complete the identification and explanation. The overall competition duration will be announced on-site.
- **No Outside Resources:** No phones, books, notes, or other external resources are allowed during the competition.

Scoring:

- **Point for correct ID:** 1 point for correctly identifying the native plant.
- **Point for relevant species:** 1 point for naming a correct native species that depends on the plant.
- **Point for life cycle needs:** 1 point for accurately explaining *why* the species depends on the plant for its life cycle.
- **Total Points:** Each plant will be worth a maximum of 3 points.
- **Tiebreaker:** Scientific name of correctly identified plants.

Judging:

- Judges will be from Natural Heritage, Quail Forever (QF), and AGFC staff.
- Judges will review the answer sheets for accuracy and completeness.
- The team with the highest total score will be declared the winner.

Important Notes:

- Students will be presented with resources before the competition to help them prepare.
- Students must register ahead of the Summit and only compete on-site.

Rubric

Native Plant Identification Competition Rubric

This rubric will be used by judges to score your team's performance in the Native Plant Identification Competition.

I. Plant Identification Accuracy

Points Available	**10-9 (Leading)**	**8-5 (Developing)**	**4-1 (Exploring)**
Correct Plant ID	Consistently identifies native plants with 90-100% accuracy, demonstrating exceptional knowledge of Arkansas flora.	Identifies native plants with 70-89% accuracy, showing good knowledge but with some errors.	Identifies native plants with less than 70% accuracy, indicating limited knowledge or frequent errors.
Accuracy of Dependent Species	Consistently names the correct native wildlife species that depend on the identified plant (90-100% accuracy).	Names correct dependent species with 70-89% accuracy, with some minor errors or less specific examples.	Names correct dependent species with less than 70% accuracy, or frequently provide incorrect/irrelevant species.
Accuracy of Life Cycle Explanation	Consistently provides accurate and clear explanations of *why* the dependent species relies on the plant for its life cycle (90-100% accuracy).	Provides accurate explanations for 70-89% of relationships, but some may lack detail or clarity.	Provides accurate explanations for less than 70% of relationships, or explanations are unclear/incorrect.

II. Knowledge Application & Efficiency

Points Available	**10-9 (Leading)**	**8-5 (Developing)**	**4-1 (Exploring)**
Application of Resources	Clearly demonstrates the effective application of pre-competition resources to accurately identify plants and relationships.	Shows good application of pre-competition resources, but may struggle with more obscure plants or complex relationships.	Shows limited application of pre-competition resources, leading to frequent errors.
Efficiency & Time Management	Teams efficiently manage their time at each station, completing all identifications and explanations within the time limit.	Teams generally manage time well, completing most tasks, but may rush or miss details on a few items.	Teams struggle with time management, leaving many identifications incomplete or rushed.

III. Adherence to Rules & Conduct

Points Available	**5 (Excellent)**	**3 (Acceptable)**	**1 (Needs Improvement)**
Rule Adherence	Consistently follows all competition rules, including no outside resources and proper conduct at stations.	Generally follows competition rules, with minor, infrequent deviations.	Frequently violates competition rules or exhibits disruptive behavior.
Clarity of Responses	Identification responses are consistently clear, legible, and follow specified formatting on the answer sheet.	Identification responses are generally clear, with minor legibility or formatting inconsistencies.	Identification responses are unclear, illegible, or consistently fail to follow specific formatting.

Study Guide

Native Plant Identification Competition Study Guide

Vital Connections: 50 Arkansas Native Plants and Their Wildlife Relationships

Competition Overview

What You Need to Do:

1. **Identify** native Arkansas plants (common names)
2. **Name** a native wildlife species that depends on each plant
3. **Explain** HOW the wildlife depends on the plant for its life cycle

Scoring: 3 points per plant (1 point each for plant ID, wildlife species, and explanation)

Study Strategy

Before the Competition

- Study plant identification features (leaves, flowers, stems, habitat)
- Learn wildlife connections for each plant
- Practice explaining relationships using key terms
- Review scientific names for tiebreakers

During the Competition

- Look for distinctive features first (leaf shape, flower type, growth pattern)
- Think about the plant's habitat and bloom time
- Use specific terms in explanations: "host plant," "nectar source," "food source," "nesting material"

50 Key Arkansas Native Plants & Wildlife Connections

MILKWEEDS (Asclepias spp.) - 14 species in Arkansas

1. Butterfly Milkweed (*Asclepias tuberosa*)

Identification:

- Bright orange flower clusters
- Clear sap (not milky like other milkweeds)
- Narrow, alternate leaves with dense pubescence
- 1-3 feet tall, blooms summer

Wildlife Connection:

- **Monarch Butterfly** - Host plant for reproduction (larvae feed exclusively on milkweed)
- **Unexpected Tiger Moth** - Host plant for caterpillars
- **Large Milkweed Bug** - Adults feed on developing seeds

2. Common Milkweed (*Asclepias syriaca*)

Identification:

- Pink-purple flower clusters
- Milky white sap
- Large, oval leaves
- 3-4 feet tall

Wildlife Connection:

- **Monarch Butterfly** - Primary host plant for reproduction
- **Ruby-throated Hummingbird** - Important nectar source
- **Milkweed Beetle** - Larvae develop in stems

3. Swamp Milkweed (*Asclepias incarnata*)

Identification:

- Pink flower clusters
- Narrow, opposite leaves
- Prefers wet soils
- 3-5 feet tall

Wildlife Connection:

- **Monarch Butterfly** - Host plant for reproduction
- **Queen Butterfly** - Secondary host plant
- **Native bees** - Critical late-season nectar source

4. Redring Milkweed (*Asclepias variegata*)

Identification:

- White flowers with red/purple centers
- Broad, opposite leaves
- Woodland species
- 2-4 feet tall

Wildlife Connection:

- **Monarch Butterfly** - Host plant for reproduction
- **Queen Butterfly** - Host plant for caterpillars
- **Native bees** - Nectar source

5. Whorled Milkweed (*Asclepias verticillata*)

Identification:

- Small white flowers
- Narrow leaves in whorls of 3-6
- Very thin, linear leaves
- 1-2 feet tall

Wildlife Connection:

- **Monarch Butterfly** - Host plant (though less preferred)
- **Small Milkweed Bug** - Feeds on seeds
- **Native bees** - Nectar source

SUNFLOWERS (Helianthus spp.) - 16 species in Arkansas

6. Ashy Sunflower (*Helianthus mollis*)

Identification:

- Yellow composite flowers
- Gray-green, heart-shaped leaves

- Leaves feel rough/sandpapery
- 1-3 feet tall

Wildlife Connection:

- **American Goldfinch** - Seeds are primary fall/winter food
- **Pine Siskin** - Important seed source
- **Native bees** - Pollen and nectar source

7. Sawtooth Sunflower (*Helianthus grosseserratus*)

Identification:

- Yellow flowers
- Serrated leaf margins
- Very tall (6-12 feet)
- Late summer bloomer

Wildlife Connection:

- **American Goldfinch** - Seeds critical for winter survival
- **Northern Cardinal** - Important seed source
- **Native bees** - Late-season nectar

ASTERS (Symphyotrichum spp.) - 30+ species in Arkansas

8. New England Aster (*Symphyotrichum novae-angliae*)

Identification:

- Purple flower heads with yellow centers
- Clasping stem leaves
- 3-6 feet tall
- Fall bloomer

Wildlife Connection:

- **Monarch Butterfly** - Critical late-season nectar for migration
- **Pearl Crescent Butterfly** - Important fall nectar source
- **Native bees** - Essential fall pollen source

9. White Oldfield Aster (*Symphyotrichum pilosum*)

Identification:

- Small white flowers in dense clusters
- Small, linear leaves
- 2-5 feet tall
- Very common fall bloomer

Wildlife Connection:

- **Painted Lady Butterfly** - Primary fall nectar source
- **Sweat bees** - Critical late-season pollen
- **Native moths** - Night nectar source

GOLDENRODS (Solidago spp.) - 30+ species in Arkansas

10. Tall Goldenrod (*Solidago altissima*)

Identification:

- Yellow flower plumes
- Serrated leaves
- 3-7 feet tall
- Late summer/fall bloomer

Wildlife Connection:

- **American Goldfinch** - Seeds are winter staple food
- **Praying Mantis** - Hunting ground for insects
- **Native moths** - Larvae feed on foliage

11. Showy Goldenrod (*Solidago speciosa*)

Identification:

- Dense yellow flower clusters
- Smooth-edged leaves
- 2-4 feet tall
- Prairie species

Wildlife Connection:

- **American Goldfinch** - Important seed source

- **Goldenrod Spider** - Hunting habitat
- **Native bees** - Fall nectar source

BLAZING STARS (Liatris spp.) - 13 species in Arkansas

12. Prairie Blazing Star (*Liatris pycnostachya*)

Identification:

- Dense purple flower spikes
- Narrow, alternate leaves
- 2-5 feet tall
- Blooms top to bottom

Wildlife Connection:

- **American Goldfinch** - Seeds consumed in fall/winter
- **Regal Fritillary** - Primary nectar source (rare butterfly)
- **Bumblebees** - Important pollen source

13. Scaly Blazing Star (*Liatris squarrosa*)

Identification:

- Purple flowers with spiky bracts
- Very narrow leaves
- 1-3 feet tall
- Sandy soil preference

Wildlife Connection:

- **Liatris Flower Moth** - Host plant for larvae
- **Native bees** - Nectar source
- **Northern Bobwhite Quail** - Seeds eaten

CONEFLOWERS (Echinacea & Rudbeckia spp.) - 12 species in Arkansas

14. Purple Coneflower (*Echinacea purpurea*)

Identification:

- Purple petals with prominent orange center cone
- Rough, oval leaves
- 2-4 feet tall

- Summer bloomer

Wildlife Connection:

- **American Goldfinch** - Seeds are primary food source
- **Eastern Bluebird** - Seeds important for nestlings
- **Native bees** - Critical nectar source

15. Black-eyed Susan (*Rudbeckia hirta*)

Identification:

- Yellow petals with dark brown center
- Hairy, lance-shaped leaves
- 1-3 feet tall
- Long blooming period

Wildlife Connection:

- **American Goldfinch** - Seeds critical for breeding season
- **Silvery Checkerspot** - Host plant for larvae
- **Native bees** - Important pollen source

WILD BERGAMOTS (Monarda spp.) - 7 species in Arkansas

16. Wild Bergamot (*Monarda fistulosa*)

Identification:

- Lavender-pink clustered flowers
- Opposite, aromatic leaves
- Square stem (mint family)
- 2-4 feet tall

Wildlife Connection:

- **Ruby-throated Hummingbird** - Primary nectar source
- **Bumblebees** - Important pollen source
- **Sphinx moths** - Night nectar source

17. Spotted Beebalm (*Monarda punctata*)

Identification:

- Yellow flowers with purple spots
- Whorl-like flower arrangement
- Strong oregano scent
- 1-3 feet tall

Wildlife Connection:

- **Bumblebees** - Specialized pollinator
- **Beneficial wasps** - Nectar source
- **Long-horned bees** - Pollen source

NATIVE TREES - 150 species in Arkansas

18. Eastern Redbud (*Cercis canadensis*)

Identification:

- Heart-shaped leaves
- Pink-purple flowers before leaves in spring
- Small tree, 20-30 feet
- Flat, brown seed pods

Wildlife Connection:

- **White-lined Sphinx Moth** - Larvae feed on leaves
- **Ruby-throated Hummingbird** - Early season nectar
- **Rose-breasted Grosbeak** - Seeds consumed

19. Black Cherry (*Prunus serotina*)

Identification:

- Serrated, oblong leaves
- White flower clusters in spring
- Dark red to black cherries
- Can reach 60+ feet

Wildlife Connection:

- **Cedar Waxwing** - Primary fruit food source

- **Eastern Tiger Swallowtail** - Host plant for caterpillars
- **Native Moths**- Larvae feed on foliage

20. Red Mulberry (*Morus rubra*)

Identification:

- Heart-shaped, often lobed leaves
- Aggregate red/purple fruits
- 30-50 feet tall
- Rough bark

Wildlife Connection:

- **Wood Duck** - Fruits are critical food source
- **Wild Turkey** - Important summer food
- **Gray Squirrel** - Primary fruit source

21. White Oak (*Quercus alba*)

Identification:

- Deeply lobed leaves with rounded lobes
- Gray, scaly bark
- Large acorns with shallow caps
- 60-80 feet tall

Wildlife Connection:

- **White-tailed Deer** - Acorns are primary fall food source
- **Wild Turkey** - Acorns critical for winter survival
- **Native moths and butterflies** - Larvae feed on leaves

NATIVE SHRUBS – 100 + species in Arkansas

22. Elderberry (*Sambucus canadensis*)

Identification:

- Compound leaves with 5-11 leaflets
- Flat-topped white flower clusters
- Dark purple berries
- 6-12 feet tall

Wildlife Connection:

- **American Robin** - Berries critical for nestling food
- **Cedar Waxwing** - Primary fruit source
- **Gray Catbird** - Important summer food

23. Buttonbush (*Cephalanthus occidentalis*)

Identification:

- White, round, pincushion-like flowers
- Opposite or whorled leaves
- Wetland shrub
- 6-12 feet tall

Wildlife Connection:

- **Wood Duck** - Seeds are important food source
- **Mallard** - Seeds consumed
- **Ruby-throated Hummingbird** - Nectar source

24. Dogwood (*Cornus florida*)

Identification:

- Four white bracts around small flower cluster
- Opposite, oval leaves with curved veins
- Red berries in fall
- Small tree/large shrub

Wildlife Connection:

- **Northern Cardinal** - Berries important fall food
- **Eastern Bluebird** - High-fat berries for migration
- **Spring Azure Butterfly** – Nectar source

VINES – 50 + species in Arkansas

25. Trumpet Honeysuckle (*Lonicera sempervirens*)

Identification:

- Tubular red flowers with yellow interior
- Opposite, oval leaves

- Upper leaves fused around stem
- Climbing woody vine

Wildlife Connection:

- **Ruby-throated Hummingbird** - Primary nectar source and co-evolved pollinator
- **Sphinx moths** - Night nectar source
- **Eastern Bluebirds** - Red berries consumed

26. Trumpet Creeper (*Campsis radicans*)

Identification:

- Large orange-red trumpet-shaped flowers
- Compound leaves with 7-11 serrated leaflets
- Aerial rootlets for climbing
- Vigorous woody vine

Wildlife Connection:

- **Ruby-throated Hummingbird** - Specialized nectar source (flower shape matches bill)
- **Bumblebees** - Important pollen source
- **Trumpet Creeper Sphinx Moth** - Host plant for larvae

VIOLETS (Viola spp.) - 15+ species in Arkansas

27. Bird's-foot Violet (*Viola pedata*)

Identification:

- Deeply divided leaves resembling bird's foot
- Large purple flowers
- No above-ground stem
- Sandy soil preference

Wildlife Connection:

- **Diana Fritillary** - Exclusive host plant (Arkansas state butterfly)
- **Great Spangled Fritillary** - Host plant for larvae
- **Regal Fritillary** - Primary host plant

28. Common Blue Violet (*Viola sororia*)

Identification:

- Heart-shaped leaves
- Purple-blue flowers
- Low-growing
- Shade tolerant

Wildlife Connection:

- **Diana Fritillary** – early nectar source (Arkansas state butterfly)
- **Wild Turkey** - Seeds and leaves consumed
- **Eastern Box Turtle** - Flowers eaten

WOODLAND WILDFLOWERS

29. Wild Columbine (*Aquilegia canadensis*)

Identification:

- Red and yellow spurred flowers
- Compound leaves with three leaflets
- 1-2 feet tall
- Spring bloomer

Wildlife Connection:

- **Ruby-throated Hummingbird** - Specialized pollinator (spurs match bill length)
- **Long-tongued moths** - Night nectar source
- **Bumblebees** – Nectar source

30. Wild Ginger (*Asarum canadense*)

Identification:

- Heart-shaped leaves
- Ground-hugging plant
- Hidden maroon flowers near soil
- Shady woodland plant

Wildlife Connection:

- **Native flies and beetles** - Flowers pollinated by ground insects

- **Wild Turkey** - Seeds consumed
- **Small mammals** - Seeds dispersed

31. Bloodroot (*Sanguinaria canadensis*)

Identification:

- White flowers with 8 petals
- Large, lobed leaves
- Red sap in roots/stems
- Early spring ephemeral

Wildlife Connection:

- **Native bees** - Early season pollen source
- **Ants** - Seeds dispersed (elaiosome)
- **Small mammals** - Seeds consumed

PRAIRIE PLANTS

32. Compass Plant (*Silphium laciniatum*)

Identification:

- Large yellow sunflower-like blooms
- Deeply divided leaves
- Leaves orient north-south
- 6-10 feet tall

Wildlife Connection:

- **American Goldfinch** - Seeds important food source
- **Native bees** - Pollen and nectar source
- **Northern Bobwhite Quail** - Seeds consumed

33. Purple Prairie Clover (*Dalea purpurea*)

Identification:

- Dense purple cylindrical flower heads
- Compound leaves with small leaflets
- Legume family (nitrogen-fixing)
- 1-3 feet tall

Wildlife Connection:

- **Northern Bobwhite** - Seeds important food source
- **Native bees** - Critical prairie pollen source
- **Dakota Skipper** - Nectar source for adults

WETLAND PLANTS

34. Cardinal Flower (*Lobelia cardinalis*)

Identification:

- Brilliant red flower spikes
- Serrated, lance-shaped leaves
- 2-4 feet tall
- Wetland plant

Wildlife Connection:

- **Ruby-throated Hummingbird** - Primary pollinator (co-evolved)
- **Great Blue Lobelia Bee** - Specialized pollinator
- **Hummingbird Clearwing Moth** - Nectar source

35. Pennsylvania Smartweed (*Persicaria pensylvanica*)

Identification:

- Pink flower spikes
- Lance-shaped leaves with papery sheaths around nodes
- Reddish stems
- 1-4 feet tall, wetland areas

Wildlife Connection:

- **Wood Duck** - Seeds are primary food source
- **Native waterfowl** - Seeds important for migration fuel
- **Red-winged Blackbird** - Seeds consumed

36. Arrowhead (*Sagittaria latifolia*)

Identification:

- Arrow-shaped leaves
- White, three-petaled flowers

- Aquatic/wetland plant
- 1-4 feet tall

Wildlife Connection:

- **Wood Duck** - Tubers primary food source
- **Muskrat** - Tubers important food
- **Native waterfowl** - Seeds and tubers consumed

FERNS & ALLIES – 60 + species in Arkansas

37. Christmas Fern (*Polystichum acrostichoides*)

Identification:

- Evergreen fronds
- Sori (spore cases) on upper fronds
- 1-2 feet tall
- Woodland plant

Wildlife Connection:

- **Wild Turkey** - Spores consumed
- **White-tailed Deer** - Winter browse
- **Native small mammals** - Shelter provided

GRASSES & SEDGES- 400 + species in Arkansas

38. Little Bluestem (*Schizachyrium scoparium*)

Identification:

- Blue-green grass turning bronze in fall
- Fluffy white seed heads
- Bunch grass
- 1-3 feet tall

Wildlife Connection:

- **Northern Bobwhite Quail** - Seeds critical food source
- **Eastern Meadowlark** - Nesting habitat
- **Dickcissel** - Seeds important food

39. Big Bluestem (*Andropogon gerardii*)

Identification:

- Tall prairie grass
- Three-branched seed heads (turkey foot)
- Blue-green stems
- 4-8 feet tall

Wildlife Connection:

- **Northern Bobwhite Quail** - Seeds and habitat
- **Bobolink** - Nesting habitat
- **Sedge Wren** - Nesting material

ADDITIONAL IMPORTANT SPECIES

40. Wild Strawberry (*Fragaria virginiana*)

Identification:

- Three-leaflet compound leaves
- White, 5-petaled flowers
- Small red berries
- Low-growing ground cover

Wildlife Connection:

- **Eastern Box Turtle** - Berries important food source
- **Chipmunk** - Primary fruit source
- **Gray Catbird** - Berries consumed

41. Partridge Pea (*Chamaecrista fasciculata*)

Identification:

- Yellow flowers with red centers
- Compound leaves that fold when touched
- Legume family
- 1-3 feet tall

Wildlife Connection:

- **Northern Bobwhite** Quail- Seeds critical food source

- **Wild Turkey** - Seeds important food
- **Native bees** - Pollen source

42. Wild Mint (*Mentha arvensis*)

Identification:

- Square stems
- Opposite, serrated leaves
- Small purple flowers in leaf axils
- Strong mint scent

Wildlife Connection:

- **Bumblebees** - Important nectar source
- **Native moths** - Night nectar source
- **Native small mammals** – habitat and shelter

43. Wild Ginseng (*Panax quinquefolius*)

Identification:

- Three compound leaves with 5 leaflets each
- Small white flower cluster
- Bright red berries
- Rare woodland plant

Wildlife Connection:

- **Wood Thrush** - Berries consumed
- **Wild Turkey** - Seeds dispersed
- **Native small mammals** - Seeds eaten

44. Mayapple (*Podophyllum peltatum*)

Identification:

- Large, umbrella-like leaves
- Single white flower under leaf
- Yellow fruit
- Colony-forming

Wildlife Connection:

- **Eastern Box Turtle** - Fruit primary food source
- **Opossum** - Fruit consumed
- **Various small mammals** - Fruit eaten

45. Jack-in-the-Pulpit (*Arisaema triphyllum*)

Identification:

- Three-leaflet compound leaves
- Hooded flower (spathe)
- Cluster of red berries
- Woodland plant

Wildlife Connection:

- **Wood Thrush** - Berries important food
- **Wild Turkey** - Seeds consumed
- **Native small mammals** - Seeds dispersed

46. Wild Leek (Ramps) (*Allium tricoccum*)

Identification:

- Two or three broad leaves
- White flower cluster on bare stem
- Strong onion scent
- Spring ephemeral

Wildlife Connection:

- **Black Bear** - Bulbs important spring food
- **Wild Turkey** - Bulbs and seeds consumed
- **Native small mammals** - Bulbs eaten

47. Pawpaw (*Asimina triloba*)

Identification:

- Large, simple leaves (6-12 inches)
- Small tree/large shrub
- Yellow-green fruits
- Maroon flowers

Wildlife Connection:

- **Zebra Swallowtail** - Exclusive host plant for larvae
- **Opossum** - Fruit primary food source
- **Raccoon** - Fruit consumed

48. Wild Plum (*Prunus americana*)

Identification:

- White flowers before leaves
- Serrated, oval leaves
- Red to yellow plums
- Small tree with thorns

Wildlife Connection:

- **Cedar Waxwing** - Fruit important food source
- **American Robin** - Fruit consumed
- **Red-headed Woodpecker** - Fruit eaten

49. Coralberry (*Symphoricarpos orbiculatus*)

Identification:

- Small, opposite leaves
- Tiny pink-white flowers
- Bright red berries in clusters
- Low shrub

Wildlife Connection:

- **Northern Mockingbird** - Berries winter food source
- **American Robin** - Berries consumed
- **Native small mammals** - Seeds dispersed

50. Wild Rose (*Rosa carolina*)

Identification:

- Five-petaled pink flowers
- Compound leaves with thorns
- Red rose hips
- Thicket-forming shrub

Wildlife Connection:

- **Cedar Waxwing** - Rose hips important food
- **Wild Turkey** - Rose hips consumed
- **Northern Cardinal** - Nesting habitat

Key Relationship Terms to Use

Host Plant Relationships

- **"Host plant for reproduction"** - Plant where insects lay eggs and larvae develop
- **"Exclusive host plant"** - Only plant species the insect can complete life cycle on
- **"Larval food source"** - Plant that caterpillars/larvae eat

Food Source Relationships

- **"Primary nectar source"** - Main flowering plant for adult feeding
- **"Seed food source"** - Seeds eaten by birds/mammals
- **"Berry/fruit food source"** - Fruits eaten for nutrition
- **"Pollen source"** - Protein-rich pollen collected by bees

Shelter/Nesting Relationships

- **"Nesting material"** - Plant fibers used in nest construction
- **"Shelter"** - Plant provides cover from predators/weather
- **"Overwintering site"** - Place where insects spend winter

Arkansas Plant Families to Know

Asteraceae (Sunflower Family)

- Composite flowers with ray and disk petals
- Includes sunflowers, asters, goldenrods
- Seeds important for songbirds

Asclepiadaceae (Milkweed Family)

- Milky sap (except butterfly milkweed)
- Pods with fluffy seeds
- Critical for monarch butterflies

Lamiaceae (Mint Family)

- Square stems, opposite leaves
- Aromatic plants
- Important for pollinators

Rosaceae (Rose Family)

- Five-petaled flowers
- Includes cherries, plums, roses
- Fruits important for wildlife

Bignoniaceae (Trumpet-creeper Family)

- Trumpet-shaped flowers
- Woody vines or trees
- Important hummingbird plants

Study Tips

1. **Focus on distinctive features** - What makes each plant unique?
2. **Learn the "why"** - Understand ecological relationships, not just memorize
3. **Practice explaining** - Use proper terminology in your descriptions
4. **Know multiple examples** - Have backup wildlife species for each plant
5. **Study scientific names** - These are used for tiebreakers
6. **Group by families** - Learn common family characteristics
7. **Consider habitat** - Woodland vs. prairie vs. wetland plants
8. **Think seasonally** - When do plants bloom and when do animals need them?

Competition Day Reminders

- **Read carefully** - Make sure you understand what's being asked
- **Be specific** - Give exact species names when possible
- **Explain clearly** - Use relationship terms correctly
- **Manage time** - Don't spend too long on difficult plants
- **Stay calm** - Use your knowledge systematically
- **Think ecology** - Consider the plant's role in Arkansas ecosystems

Recommended Photo Resources

Official Government Sources

- Arkansas Natural Heritage Commission (www.naturalheritage.com)
- USDA PLANTS Database (https://plants.usda.gov)
- State botanical surveys and herbarium collections

University and Scientific Sources

- University of Arkansas Cooperative Extension
- Missouri Botanical Garden's PlantFinder
- iNaturalist.org (Arkansas location data)
- GBIF.org (Global Biodiversity Information)

Published Field Guides

- **"Ozark Wildflowers"** by Don Kurz - Regional specialist guide
- **"Arkansas Ferns and Fern Allies"** by George Yatskievych
- **"Flora of Arkansas"** by Edwin Smith - Comprehensive state flora
- **"Wildflowers of Arkansas"** by Carl Hunter
- **"Trees of Arkansas"** by Dwight Moore
- **Peterson Field Guide series** - Wildflowers, trees, ferns
- **National Audubon Society Field Guides** - Regional plant guides
- **“Arkansas Butterflies and Moths”** by Lori Spencer

Digital Apps and Online Resources

- **PlantNet** - AI-powered plant identification
- **Seek by iNaturalist** - Camera-based plant ID
- **LeafSnap** - Leaf identification app
- **Arkansas Flora Atlas** - Distribution and habitat data
- **Biota of North America Program (BONAP)** - County-level distribution maps

Good luck! Remember: Every native plant supports wildlife in Arkansas's ecosystems.