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Title: Embracing Biodiversity: Establishing a Pollinator Garden in Conway, AR

Introduction

The City of Conway, AR, is blessed with natural beauty and a commitment to environmental sustainability. One of the most impactful ways to enhance the city's ecological footprint is by establishing a pollinator garden. By selecting an ideal location, carefully curating the plant species, and implementing a cost-effective maintenance plan, the city can create a vibrant, biodiverse haven for pollinators while promoting public awareness of the importance of these essential creatures. This recommendation outlines the proposed location, plant selection, and associated costs for both the initial setup and long-term maintenance of the pollinator garden.

Location Selection

The ideal location for the pollinator garden would be within one of Conway's prominent parks, such as Laurel Park or Centennial Park. According to a report by the National Recreation and Park Association (NRPA), "Establishing pollinator gardens in public parks can help support native wildlife and increase green spaces accessible to communities." These parks are known for their accessibility, popularity among residents, and existing amenities that can complement the garden. Additionally, being central within the city will attract a diverse range of visitors and ensure the garden's visibility.

Plant Selection

A well-thought-out plant selection is crucial to attracting and sustaining pollinators throughout the year. According to a study published in *Environmental Entomology*, "Native plants are more effective at attracting and supporting native pollinators compared to non-native species."

Therefore, native plants should take precedence, as they are adapted to the local climate, require less maintenance, and provide better support for local pollinators. Some recommended native plants for the pollinator garden in Conway include:

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- a) Milkweed (*Asclepias* spp.): Essential for monarch butterflies, as it serves as the sole food source for their caterpillars.
- b) Purple Coneflower (*Echinacea purpurea*): A favorite of bees and butterflies, providing nectar throughout the season.
- c) Bee Balm (*Monarda* spp.): Attracts hummingbirds, butterflies, and various bee species.
- d) Black-eyed Susan (*Rudbeckia hirta*): A staple for native bees and other pollinators.
- e) Liatris (*Liatris* spp.): A valuable late-season nectar source for butterflies and bees.
- f) Wild Bergamot (*Monarda fistulosa*): Aromatic and attractive to many pollinators.
- g) Joe-Pye Weed (*Eutrochium* spp.): Loved by bees and butterflies for its abundant nectar.
- h) Goldenrod (*Solidago* spp.): Provides nectar for bees, butterflies, and other insects.

Additionally, the inclusion of ornamental plants may add visual appeal to the garden, but it is essential to choose them carefully to ensure they do not hinder the overall pollinator-friendly environment.

- i) Non-Pollinator Friendly Plant: Azaleas (*Rhododendron* spp.): While azaleas are beautiful ornamental shrubs, according to the University of Florida IFAS Extension, they "offer no nectar reward for pollinators." Therefore, their use should be minimized in the pollinator garden to prioritize pollinator-friendly species.
- j) Challenging Plant for the Climate: Lavender (*Lavandula* spp.): Lavender is a popular plant due to its delightful fragrance and visual appeal, but it may not thrive in Conway's climate, which can be humid and hot during the summer. According to the Clemson Cooperative Extension, "lavender prefers a Mediterranean climate, and while it can grow in other areas, it may struggle in hot and humid conditions." While some varieties of

lavender can adapt, it requires extra care and attention to establish and maintain them successfully in this region.

Initial Setup Costs

The initial setup of the pollinator garden will involve several key aspects, including site preparation, plant acquisition, and installation. The estimated costs are as follows:

- a) Site preparation: \$2,500 - This includes clearing any existing vegetation, soil preparation, and amendments, as well as setting up irrigation if necessary.
- b) Pollinator-friendly plant acquisition: \$2,500 - To establish a diverse and robust pollinator garden, an assortment of native plants will be required.
- c) Ornamental plant acquisition: \$500 - Including a few carefully selected ornamental plants for visual appeal.
- d) Garden installation: \$1,500 - Professional landscape services will be needed to ensure proper planting and spacing, maximizing the garden's potential.
- e) Educational signage and materials: \$800 - Informative signage will be placed strategically to educate visitors about the garden's significance and the role of pollinators in ecosystems.

Total Initial Setup Costs: \$7,800

Maintenance Costs

To maintain the pollinator garden's vitality and ensure its long-term success, consistent maintenance will be necessary. The annual maintenance costs are projected as follows:

- a) Watering and irrigation: \$800 - Watering will be essential, especially during the establishment phase and in dry periods.
- b) Weed control: \$500 - Regular weeding will be necessary to prevent invasive plants from competing with the pollinator-friendly species.

- c) Pruning and trimming: \$300 - Occasional pruning and trimming will promote healthy growth and flowering.
- d) Fertilization: \$200 - Light, organic fertilization will support plant health without disrupting the ecosystem.
- e) Replacement plants: \$300 - Some plants may need to be replaced due to natural attrition.
- f) Ornamental plant care: \$150 - Additional care and maintenance will be required for the selected ornamental plants.
- g) Educational program upkeep: \$500 - Allocating resources to maintain educational materials and programs will ensure ongoing public engagement.

Total Annual Maintenance Costs: \$2,750

Conclusion

By creating a pollinator garden in one of Conway's beloved parks, the city will not only beautify the area but also foster an environment that supports the vital pollinators essential for the health of our ecosystem. Utilizing native plant species and minimizing non-pollinator friendly plants while being mindful of the climate challenges will reduce maintenance costs and enhance the garden's appeal to local pollinators. The initial setup cost of \$7,800 and an annual maintenance budget of \$2,750 represent a sound investment in the city's ecological future, providing lasting benefits for the environment, community, and biodiversity. This project will serve as a testament to Conway's commitment to sustainability, education, and the preservation of its natural heritage.