Excerpts from "Why Native Plants are Better for Birds and People"*

By Marina Richie

Your garden is your outdoor sanctuary. With some careful plant choices, it can be a haven for native birds as well. Landscaped with native species, your yard, patio, or balcony becomes a vital recharge station for birds passing through and a sanctuary for nesting and overwintering birds. More native plants mean more choices of food and shelter for native birds and other wildlife.

To survive, native birds need native plants and the insects that have co-evolved with them. Most landscaping plants available in nurseries are exotic species from other countries. Many are prized for qualities that make them poor food sources for native birds—like having leaves that are unpalatable to native insects and caterpillars. With 96 percent of all terrestrial bird species in North America feeding insects to their young, planting insect-proof exotic plants is like serving up plastic food. No insects? No birds.

For example, research by entomologist Doug Tallamy has shown that native oaks support more than 550 different species of butterflies and moths alone. The non-native ginkgo tree supports just 5. Caterpillars are the go-to food source for migrant and resident birds alike. In the 16 days between hatching and fledging, a clutch of Carolina Chickadee chicks can down more than 9,000 of them. Tallamy's work points to native landscaping as a key tool in increasing bird diversity and abundance. Want more birds? Provide more food = plant more native plants.

Many of the best native plants for birds are also important plants for insect pollinators—both as sources of nectar and as "host" plants. Planting for pollinators will not only support pollinating insects such as butterflies and moths; it will also provide the protein-rich insect food that baby birds need to grow and thrive.

By planting native species, you will also:

Save water: According to the Environmental Protection Agency, 30 to 60 percent of fresh water in American cities is used for watering lawns. Native plants have adapted to thrive in their regional landscape, without added water or nutrients. Florida experiences drought conditions frequently, so it's a good idea to shift to water-wise yards and native plants.

Control flooding: Cultivating vertical structure in your yard by planting many different species of herbaceous flowering plants, shrubs, and trees creates layers of vegetation that deflect pounding rains, increasing the chance for water to be absorbed by your soil before running off into storm drains and streams. Replenishing our depleted aquafer is an important concern for all Floridians.

Use fewer chemicals: Less lawn mowing, fertilizing, and pesticide application means cleaner air and water. Homeowners apply nearly 80 million pounds of pesticides to lawns in the United States each year. What's more, they use up to 10 times more pesticides per acre on their lawns than farmers use on crops. During storms, lawn chemicals can be carried by runoff and wind, contaminating streams and wetlands many miles away. In Florida, fertilizer runoff is a contributing factor in destructive red tides and blue-green algal blooms.

*Original unedited article: https://www.audubon.org/news/why-native-plants-are-better-birds-and-people

Save money: Less lawn mowing, fertilizing, pesticide application, and watering means lower bills for these services and products. Tamarind Village HOA in Broward county saw a drop of \$16,000 in water bills, \$13,000 in fertilizer bills, and \$5,000 in pest control bills in the year following adopting Florida friendly landscape practices in their community. Plus, those beautiful oak trees can help with energy bills by shading walls and windows and reducing local temperatures through evapotranspiration in the summer, lowering power bills an average of 35% during our 7-8 months of hot weather. They can be placed to act as windbreaks, helping with heating bills in winter. In 2007 the city of Gainesville saw a \$1.9 million savings in energy bills due to the effect of trees, compared with an increase of \$0.4 million in winter heating costs (due to shade). (from UF IFAS resources)

And a bird-friendly "native plant garden" doesn't mean "wild thicket"—native plant gardens can be as visually pleasing as gardens that use non-native plants, they are just more attractive to birds and easier to maintain!

Here's the numbers:

557: Varieties of butterflies and moths supported by native oak trees, as compared to...

5 butterfly and moth species supported by non-native ginkgo trees.

1,200: Number of crops that depend on pollinators to grow.

96: Percentage of land birds that rely on insects to feed chicks.

6000-9000: Number of caterpillars needed to raise one nest of chickadees over 16 days.

80 million: Pounds of pesticides applied to lawns in the U.S. annually. Native plants, on the other hand, support a balance of predator and prey and thrive without pesticides.

800 million: Gallons of gas used annually by lawn mowers. This is expensive and produces pollutants.

9 billion: Gallons of water used each DAY to irrigate landscaping. Half is wasted through evaporation and runoff, carrying pesticides and fertilizers with it.

(Modified from Audubon's article on "How to Make Your Yard Bird Friendly": <u>https://www.audubon.org/news/how-make-your-yard-bird-friendly-0</u>) Why Native Plants are Better for Birds and People. Marina Richie. <u>https://www.audubon.org/news/why-native-plants-are-better-birds-and-people</u>

How to Make Your Yard Bird Friendly. National Audubon Society. https://www.audubon.org/news/how-make-your-yard-bird-friendly-0

Non-native plants in homeowners' yards endanger wildlife, UD researchers report. Dante LaPenta. <u>https://www.udel.edu/udaily/2018/october/non-native-plants-birds-insects-washington-chickadee-desiree-narango-doug-tallamy/</u>

UF IFAS Extension. FOR211. The Effect of Gainesville's Urban Trees on Energy Use of Residential Buildings. Francisco Escobedo, Jennifer A. Seitz, Wayne Zipperer, and Basil Iannone

UF IFAS Extension. EES42. Enviroscaping to Conserve Energy: Trees for South Florida. Timothy K. Broschat, Alan W. Meerow, and Robert J. Black.

UF IFAS Extension. Presentation. The Florida Friendly Landscaping Program. https://ffl.ifas.ufl.edu/LegallySpeaking2017/2017-1_FFL-Review_Momol.pdf