



Village of Palmetto Bay
Department of Planning and Zoning

Internal Office Memorandum

To: Ron Williams
Village Manager

Date: June 17, 2009

From: Julian Perez 
Director Planning and Zoning

Re: Trees/Shrubs
to Attract Migratory Birds

The intent of this memorandum is to provide the Mayor and Village Council with information regarding the different types of trees and shrubs available in our area that can be used to attract and support migratory birds that visit our Village and surrounding communities every year. Some of these birds will stop briefly in our Village on their way to other destinations, while others will stay in the Village and surrounding areas for several months before leaving our area. Most of the long-distance migratory birds including the songbirds and shorebirds will migrate at night to take advantage of cooler temperatures and to avoid potential predators. The distance traveled by these birds vary greatly depending on the species.

“There are more than 200 species of migratory birds in the West Hemisphere.” (Noyes: 2005-07). However, since the 1960s, the population of migratory birds has declined by approximately 50 percent due to habitat destruction and manmade obstacles.(1) To address the loss of habitat private landowners and the public are working with governmental agencies at all levels, and non-governmental organizations (NGOs) to provide needed habitat for these birds while still maintaining their current uses.(2)

One of the most common species of migratory birds found in our area is the songbirds. To attract this specie and other migratory birds is a special challenge. These birds are attracted to areas where there is an ample supply of insects and fruits that are high in carbohydrates, which allows them to store fat that will be used as energy while they are migrating.(3) The literature recommends planting native trees and shrubs in the backyard and garden will attract the migratory birds. The native trees and shrubs usually attract insects that these birds like to eat. The backyard and garden should have several water sources (bowl of water, a fountain, birdbath, a pond or stream) located throughout the area. Having an ample supply of drinking water will be an excellent way for attracting these birds to either the backyard or garden. Creating a natural habitat by planting a combination of native trees and shrubs will be an excellent starting point to attract these birds. In addition, when pruning your trees it is recommended to pile the branches in a secluded corner of your yard to create a brush pile. (4) This will provide the birds with a safe environment to rest.

These recommendations are extremely valuable to ensure the survival of these magnificent birds, which are an important component to a balance ecosystem. As part of this report, we have attached a matrix with information regarding trees and shrubs that can be planted by our residences in their backyard and gardens to attract both migratory and native birds to their properties.

Sources:

1. Noyes, Katherine, Senior Editor – Animal Welfare. “Help Migratory Birds Reach Their Destination.” 2005-07. www.charityguide.org
2. Reshetiloff Kathy. “They’re back! Migratory birds returning to Chesapeake area, Webs for Wings, and more.” May 2000. www.bayjournal.com
3. Alward Mary M. “Attracting Migratory Birds to Your Garden.” www.doityourself.com
4. Ibid 3

Village of Palmetto Bay
Native Trees and Shrubs - Habitat for Native and Migratory Birds

No	Trees Common Name (Scientific Name)	Size (feet)	Comments
Large Trees			
1	Gumbo-Limbo (<i>Bursera simaruba</i>)	20-50	A large semi-deciduous tree with red peeling bark. Large branches root easily but may form weak root systems. Seed-grown trees are strong and stand up to strong winds. May require corrective pruning when young. The fruits are eaten by Kingbirds and Flycatchers in spring.
2	Live Oak (<i>Quercus virginiana</i>)	40-50	A large tree with a slow to moderate growth rate. Mature trees have large, spreading branches so give this tree the room it requires. Hummingbirds eat the male pollen in spring. Larval host plant of the White-M Hairstreak. Woodpeckers are fond of oaks and the acorns are eaten by squirrels.
3	Shortleaf Fig (<i>Ficus citrifolia</i>)	25-50	A large fast-growing tree that may produce aerial roots to support larger branches. The fruits are eaten by a variety of birds, especially Cedar Waxwings. Avoid planting near underground utilities due to its aggressive roots.
4	Wild Tamarind (<i>Lysiloma latisiliquum</i>)	40-60	A spreading, fine-textured tree with attractive, feathery leaves. One of the best native trees to attract Warblers, Gnatcatchers, Flycatchers, and Vireos. Larval host plant of the Large Orange Sulphur butterfly.
Medium Trees			
5	Bahama Strongback (<i>Bouyeria succulenta</i>)	20	A handsome medium-sized tree with drooping branches. The flowers are visited by hummingbirds and butterflies, and the fruits are eaten by Mockingbirds, Catbirds, and Blue-headed Vireos.
6	Blackbead (<i>Pithecellobium keyense</i>)	10-20	Large shrub or small tree with short trunk. Small, mimosa-like, fragrant flowers are white to pink. Contorted bean pods split open to reveal black seeds covered with a fleshy red aril. Larval host plant of the Large Orange Sulphur and Cassius Blue butterflies.
7	Black Ironwood (<i>Krugiodendron ferreum</i>)	30	A very handsome native tree with a moderate growth rate. A good tree to plant for Warblers, Vireos, Gnatcatchers, and Flycatchers. The wood is very dense.
8	Buttonwood (<i>Conocarpus erectus</i>)	5-50	Often used for hedges but will mature into a very attractive multi-trunked tree. Excellent to attract Warblers and Vireos. A silvery-leaved form is attractive but susceptible to sooty mold.

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No	Trees Common Name (Scientific Name)	Size (feet)	Comments
9	Dahoon (<i>Ilex cassine</i>)	15-30	Small, upright tree or large shrub with glossy dark green oblong leaves. Attractive red berries in winter on female trees. Prefers moist soils and requires regular fertilization to avoid nitrogen deficiency.
10	Lancewood (<i>Ocotea coriacea</i>)	15-25	Ideal as a small shade tree. Glossy, lance-shaped leaves; highly aromatic when crushed. Flowers: white, fragran. Fruits are purple to black and held in a reddish cup. Birds eat the fruits, especially Thrushes.
11	Satinleaf (<i>Chrysophyllum oliviforme</i>)	30	An attractive tree with leaves that are dark green above, golden pubescent below. Closely related to the Caimito. The olive-shaped small fruits are eaten by birds.
12	White Ironwood (<i>Hypelate trifoliata</i>)	30-40	Evergreen shrub to small tree, upright, rather dense, trifoliate leaves. Small, lightly fragrant white flowers, in spring and summer. Black fruits eaten by birds.
Small Trees and Shrubs			
13	American Beautyberry (<i>Callicarpa americana</i>)	6-8	A small shrub with pink flowers in balls at the leaf axils, which are followed by rosy-purple fruits that are eaten by birds, especially Mockingbirds and Catbirds. Butterflies visit the flowers. Cutting the plant back to the ground every other year will help keep it from becoming too leggy.
14	Bird Pepper (<i>Capsicum annuum</i> var. <i>glabriusculum</i>)	1.5-3	Dwarf, dense, evergreen shrub with glossy, dark green leaves and tiny, extremely hot peppers which are highly attractive to Mockingbirds. Grown by early settlers in South Florida.
15	Butterfly Sage (<i>Cordia globosa</i>)	4-9	A rounded shrub with small, cupped, white flowers. One of the best butterfly attracting shrubs for South Florida. Birds eat the red fruits. May spread from seed.
16	Cinnamon Bark (<i>Canella winterana</i>)	10-30	One of South Florida's most ornamental trees: slow-growing with a dense, broad crown; thick, aromatic leaves. Small red flowers are followed by small red fruits that birds eat. Inner bark has cinnamon-like aroma.

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No	Trees Common Name (Scientific Name)	Size (feet)	Comments
17	Coral Bean (<i>Erythrina herbacea</i>)	3-15	A small shrub with long thorny branches topped by very showy red flowers that are attractive to hummingbirds. Fruits are poisonous to eat. Grows easily from cuttings. Very drought tolerant.
18	Firebush (<i>Hamelia patens</i>)	5-15	An open shrub (in full sun) to small tree (in part shade). Showy tubular orange/red flowers year-round. Stems brittle and easily broken. The flowers are highly attractive to butterflies and hummingbirds, and birds eat the small purple fruits.
19	Florida Privet (<i>Forestiera segregata</i>)	10	Bushy shrub or much-branched tree with multiple trunks. Can be used as tall hedge in place of ligustrum. The small purple fruits are savored by birds.
20	Geiger Tree (<i>Cordia sebestena</i>)	25-30	A very attractive tree when covered with clusters of bright orange flowers, which attract hummingbirds and butterflies. My be killed back by freezes, and the leaves are susceptible to damage by tortoise beetle larvae. Very salt tolerant.
21	Lignum-vitae (<i>Guajacum sanctum</i>)	6-25	A most attractive, very slow-growing, small tree, with a short contorted trunk and rounded crown of shiny compound leaves. Deep blue flowers are produced several times a year, principally in spring. The bright red seeds are favored by Mockingbirds, Catbirds, and Blue-headed Vireos.
22	Little Strongback (<i>Bouyeria cassinifolia</i>)		A small compact shrub or small tree with small sandpapery leaves. The small white flowers attract butterflies and hummingbirds, and birds eat the small orange fruits. Very drought tolerant.
23	Long-stalked Stopper (<i>Mosiera longipes</i>)	3-12	Rather straggly shrub or rarely a small tree; dark green, glossy leaves and red new growth. Small white flowers are followed by small red or purple fruits that are eaten by birds.
24	Myrtle-of-the-River (<i>Calypttranthes zuzygium</i>)	25	Large shrub to medium tree with dark green leaves, pink-tinged new growth, and attractive white flowers. Birds eat the dark purple fruits.
25	Necklace Pod (<i>Sophora tomentosa</i>)	6	Large, usually leggy, sprawling shrub. Showy terminal spikes of bright yellow flowers followed by necklace-like pods with pronounced constrictions between each seed. One of the best plants to attract hummingbirds. Seeds are poisonous to eat. Very salt tolerant.

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Native Trees and Shrubs - Habitat for Native and Migratory Birds

No	Trees Common Name (Scientific Name)	Size (feet)	Comments
26	Red Stopper (<i>Eugenia rhombea</i>)	10	Smooth, light grey bark and elegant growth habit. Rather slow growing but maintains a compact canopy. Flowers are white and the fruits are red to purple.
27	Redberry Stopper (<i>Eugenia confusa</i>)	6-18	Very attractive small tree with glossy leaves and red fruits. Best used as a specimen plant. A variety of birds eat the fruits.
28	Red Mulberry (<i>Morus rubra</i>)	5-9	Small deciduous tree, with a short trunk that branches low. The fruits are delicious and savored by people and birds. Prefers moist soil.
29	Seven-Year-Apple (<i>Genipa clusiifolia</i>)	15	A much-branched large shrub or small tree. Male trees produce clusters of white, tubular, very fragrant flowers. Female flowers are similar but solitary and are followed by oval fruits. Hummingbirds are fond of the flowers.
30	Simpson Stopper (<i>Myrcianthes fragrans</i>)	6-20	A very attractive small tree that is covered in spring with small white flowers, followed by equally showy orange fruits that are eaten by birds. The trunk is smooth with flaking thin bark, much like a guava.
31	Spicewood (<i>Calypttranthes pallens</i>)	5-25	Small, shrubby tree with aromatic leaves, burgundy-tinged new growth, and small white flowers. Can be sheared and grown as a hedge. Birds eat the small purple fruits.
32	Wax Myrtle (<i>Myrica cerifera</i>)	8-12	A small multi-branched shrub or small tree with branches that are lined with small aromatic purple fruits that are eaten by a variety of birds, especially Tree Swallows. Prefers wet soils. Very susceptible to lobate lac scale that may cause die-back.
33	White Stopper (<i>Eugenia axillaris</i>)	5-20	Small tree with pale, whitish bark and aromatic foliage (overpowering to some-plant away from house). Small, white flowers in midsummer are followed by purplish berries. Sandy or calcareous soils with some organic content. Somewhat drought tolerant. Attractive to birds.
34	Wild Coffee (<i>Psychotria</i> spp)	4-6	Three species are native to South Florida and all produce small white flowers followed by clusters of red fruits that are eaten by birds. Ruddy Daggerwing butterflies are particularly fond of the flower nectar. Great for shady areas.
35	Wild Sage (<i>Lantana involucrata</i>)	4-5	Upright, woody shrub with small oval leaves and clusters of white or pink-tinged flowers. Butterflies visit the flowers and birds eat the small violet fruits.

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Native Trees and Shrubs - Habitat for Native and Migratory Birds

No	Trees Common Name (Scientific Name)	Size (feet)	Comments

Sources:

1. Hammer, Roger L. (2009). The Best Bird-Attracting Native Trees and Shrubs for South Florida.
2. McLaughlin, John; Vazquez, Laura; Haynes, Jody (2003). Native Landscape Plants for South Florida. University of Florida -IFAS Extension. ENH 875.
3. Florida Native Plants Society (1999). Native Trees for Miami-Dade County Landscapes. Dade Chapter.
4. Miami-Dade County Environmental Resources (2009). "Table 1: A List of Some Nature Plants that Attract Birds." www.miamidade.gov/derm/tips_landscaping_bird_attraction_print.a
5. Philippe Faucon (1998-2005). USDA Forest Service Collection, Courtesy of the Hunt Institute. www.desert-tropicals.com
6. Philippe Faucon (1998-2005). Red Mulberry. www.desert-tropicals.com
7. Gilman, Edward F.; Watson, Dennis G. (1993). Cordia sebestena Geiger-Tree. USDA Forest Service. Fact Sheet ST-182.

Village of Palmetto Bay
 Bird Species - Native and Migratory Birds

No	Bird Species	Palmetto Bay	Resident Native Urban Birds	Migratory Urban Native Birds	Non-Native Urban Birds
Fruit and Seed Eating Birds					
1	Hummingbirds (Ruby-throated Hummingbird; Rufous Hummingbirds)	√		√	
2	Blue-Headed (Salitary) Vireo	√		√	
3	Painted Bunting	√		√	
4	Indigo Bunting	√		√	
Insect Eating Birds					
5	Common Flicker	√	√		
6	Yellow-Bellied Sapsucker	√		√	
7	Downy Woodpecker	√	√		
8	Scissor-Tailed Flycatcher	√		√	
9	Calorina Wren	√	√		
10	Eastern Phoebe	√		√	
11	House Wren	√		√	
12	Blue-Gray Gnatcatcher	√	√		
13	Gray Catbird	√		√	
14	Loggerhead Shrike	√	√		
15	Vireos	√	√		
16	Warblers	√	√		
17	Baltimore Oriole	√		√	
Fruit and Seed / Insect Eating Birds					
18	Red-bellied Woodpecker	√	√		
19	Blue Jay	√	√		
20	Northern Mockingbird	√	√		
21	Eastern Kingbird			√	
22	Western Kingbird	√	√		
23	Gray Kingbird			√	
24	Great Crested Flycatcher	√	√		
25	Brown Thrasher			√	
26	Gray Catbird	√	√		
27	Cedar Waxwing	√		√	
28	Red-winged Blackbird	√	√		
29	Common Grackle	√	√		
30	Northern Cardinal	√	√		
31	Whip-Poor-Will	√		√	
32	Tree Swallow	√		√	
33	Barn Swallow	√		√	
34	Rough-Winged Swallow	√		√	
35	Purple Martin	√		√	
36	American Robin	√		√	
37	Hermit Thrush	√		√	
38	Black-Whiskered Vireo	√		√	
39	Red Eyed Vireo	√		√	
40	Northern Parula Warbler	√		√	

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No	Bird Species	Palmetto Bay	Resident Native Urban Birds	Migratory Urban Native Birds	Non-Native Urban Birds
41	Yellow-Throated Warbler	√		√	
42	Black-Throated Green Warbler	√		√	
43	Black-and White Warbler	√		√	
44	Black-Throated Blue Warbler	√		√	
45	Yellow-Rumped Warbler	√		√	
46	Palm Warbler	√		√	
47	Orange-Crowned Warbler	√		√	
48	Northern Waterthrush	√		√	
49	Ovenbird	√		√	
50	Yellow-Breasted Chat	√		√	
51	Brown-Headed Cowbird	√		√	
52	American Goldfinch	√		√	
53	Rose-Breasted Grosbeak	√		√	
54	Cattle Egret	√	√		
55	White Ibis	√	√		
56	Chuck-Will's-Widow	√	√		
57	Mouring Dove	√	√		
58	Ground Dove	√	√		
59	White-Crowned Pigeon	√	√		
60	Yellow-Billed Cuckoo	√	√		
61	Common Yellowthroat	√	√		
62	Boat-Tailed Grackle	√	√		
63	Muscovy Duck (Asia)				√
64	Rock Dove (Old World)				√
65	Eurasia Collared-Dove (Eurasia)				√
66	Spotted Oriole (Central America)				√
67	European Starling (Europe)				√
68	Hill Myna (Southern Asia)				√
69	Common Myna (Southern Asia)				√
70	Spotted Munia (Southeast Asia)				√

Sources

Hammer, Roger (2009), Recreation Specialist Supervisor. Miami-Dade County Parks and Recreation. Castellow Hammock Park. Planning and Zoning Department (2009). Village of Palmetto Bay.

Note:

1-This is a preliminary list which may not be inclusive of all resident and migratory urban birds that may be found in Palmetto Bay.