

**Testimony before the
Subcommittee on Fisheries, Wildlife, Oceans and Insular
Affairs**

**United States House of Representatives Committee on
Natural Resources**

Wednesday, July 23, 2014

**On H.R. 3409, National Wildlife Refuge Expansion Limitation
Act of 2013**

By

Martin C. Cornell

Grant Administrator

Friends of Brazoria Wildlife Refuges

Good morning.

I am Marty Cornell. I retired twelve years ago after 35 years as a scientist for The Dow Chemical Company, and since then I have been an active volunteer and member of the board of the Friends of Brazoria Wildlife Refuges (Friends)ⁱ. I am here today in that latter capacity, where I serve as Grant Administrator. In that role, I apply, administer, and report on a constant flow of grants and gifts to support three National Wildlife Refuges located along the mid-coast of Texas; the Brazoria, San Bernard, and Big Boggy National Wildlife Refuges. These three refuges are administered by the Texas Mid-coast National Wildlife Refuge Complex (TMCNWRC)ⁱⁱ. Many of these grants and gifts are targeted to support the acquisition of tracts of land for the San Bernard National Wildlife Refuge (SBNWR). I shall be using the experience of the San Bernard NWR to frame our case regarding the Bill H.R. 3409.

I very much appreciate the opportunity to speak to this subcommittee on the negative impacts that would occur to the Land Protection Plan of the San Bernard NWR if the Bill, H.R. 3409, known as the National Wildlife Refuge Expansion Limitation Act of 2013, were to become law.

First, some orientation is in order. Starting in 1996, the Department of the Interior, under the US Fish and Wildlife Service (USFWS), began acquiring land in Brazoria County, Texas, because this region along the Gulf coast, with our coastal shores, bays, estuaries, prairie's, and riparian forests, is an ideal habitat for wildlife, especially for resident and migrating birds.

Of special importance are the bayous, streams, and three major rivers in Brazoria and neighboring Matagorda County that empty into the Gulf of Mexico, the Brazos, San Bernard, and Colorado Rivers. These rivers and streams support old growth hardwood forests that provide shelter, food, and water for native and migrating wildlife. Named Austin's Woods or the Columbia Bottomlands Forest, this land is the southernmost riparian forest along the Gulf Coast of the United States (figure 1). It is an oasis, separated from other coastal forests by vast expanses of prairie, farmland, and urban areas.

Prior to European settlement, these forests and wetlands consisted of about 700,000 acres. Their location and size attracted Nearctic and Neotropical migrating birds, and became ingrained in their instinctive migration routes. Today, millions of birds make this trek through the Columbian Bottomlands forests, many taking the 600-mile path from Mexico's Yucatan Peninsula over the Gulf of Mexico to the Columbia Bottomlands Forest, where they find safe haven (figure 2). This pattern is dramatically shown on figure 3 in the Doppler radar image taken in February, 2006, with massive flocks nearing our coastline, and other birds, having rested and refreshed, continuing their journey north to breeding grounds.

Because of our unique location and ecology, we are blessed to have over 100 species of resident birds, and in 1997 counted 237 species of non-resident birds, totaling over

29 million individuals, migrating through our forests. During migration, bottomland hardwood forests are particularly valuable to a large variety of warblers, vireos, thrushes, tanagers, buntings, goatsuckers, and other forest birds that seek out forest resources after a long flight to recuperate and refuel. In Mississippi, research has demonstrated that Neotropical migrants using coastal forests are found in increasing abundance with increasing density of forest trees and increasing numbers of insects in forest understoriesⁱⁱⁱ.

This makes southern Brazoria County and our refuges a Mecca for birders from all over the world. A 2011 survey by the USFWS estimated that one million people ventured away from home to observe wildlife in Texas and spent \$1.8 billion in the process^{iv}. Over 75,000 visitors enjoy our three refuges each year, including over 32,000 who cite wildlife observation as the attraction for touring the San Bernard and Brazoria National Wildlife Refuges. Additionally, 3,400 visitors hunt migrating waterfowl during the hunting season and an estimated 30,000 fishermen enjoy the bays and estuaries of the complex; 70% of them by boat. Using the expenditure per person ratio from the 2011 USFWS survey, this equates to \$1,800 per person in direct and trickle down impact, or \$118 million per year for the ecotourism on our refuges.

We are also fortunate that southern Brazoria County and the adjoining Matagorda, Fort Bend, and Wharton counties remain largely rural, despite being as close as a one hour drive from Houston, Texas, the fourth largest metropolis in the United States. A great many of the industrial and private landowner neighbors of our refuges fully appreciate the value of our natural ecosystems, as opposed to urban sprawl, and offer property to be donated or sold to the US Fish and Wildlife Service.

A recent example of this is a 338-acre tract of bottomlands forest, bisected by Bastrop Bayou, and located within the extraterritorial jurisdiction of the City of Lake Jackson, Texas. This land, appraised at \$1,800,000, was donated to the San Bernard National Wildlife Refuge by The Dow Chemical Company, our county's largest employer. Subsequent development of 2.5 miles of ADA-compliant trails and other facilities were made possible from over \$300,000 in grants and gifts awarded to the Friends of Brazoria Wildlife Refuges. Today, this Dow Woods Unit of the San Bernard NWR is an "urban refuge" that was enjoyed by over 4,500 visitors in 2013, with visitation growing as the recently completed trails become better known (figure 4).

It is noteworthy that the provision of the proposed National Wildlife Refuge Expansion Limitation Act of 2013 would have required a time-consuming and cumbersome act of congress for this donated land to become part of our refuge system. With such a substantial negative impact, the question is begged, "What would be the net gain if H.R. 3409 were to become law?" In our case, where only a small portion of discretionary federal funds are involved, the answer would lead to a loss to the citizens, not a gain.

The Dow Woods Unit is also an example of public access development done with private funds, such as those from our Friends organization.

The Friends of Brazoria Wildlife Refuges was chartered in 1994 and became a 501(c)(3) tax-exempt organization in 1995. One of our major activities is to acquire funds through grants, gifts, and fundraising efforts. These funds are used to develop public use facilities, support environmental education programs, and conduct wildlife surveys. Over 36% of these funds support pre-land acquisition discovery activities, which streamlines the process of acquiring donated or purchased tracts of property, such as the Dow Woods Unit (figure 5).

In 1997, concern over the rapid destruction of prime, old-growth bottomland hardwood forest in the Columbia Bottomland ecosystem led to a coordinated effort by federal, state, and local government agencies, together with landowners and conservation organizations, to preserve enough of this forest and adjoining prairie to sustain its biodiversity on which substantial populations of migratory birds depend. It is believed that 70,000 acres would provide this insurance (ten percent of the original 700,000 acres).

As part of the resulting 1997 Decision Document of the Austin's Woods Conservation Plan, the US Fish and Wildlife Service was authorized to purchase of up to 28,000 acres as its share of the 70,000-acre goal of the involved conservation partners. For various reasons, the other partners have since been unable to execute any substantial land purchases. They have, however, been active in assisting the Service in its land-acquisition process. On June 25, 2013 the Service authorized an increase of the acquisition cap to the full 70,000 acres within the established acquisition boundary shown on figure 6.

Over the 16 years through the end of 2013, over 33,000 acres have been acquired by the U.S. Fish and Wildlife Service, as shown on the map of figure 7. Details of this plan are covered in the Texas Mid-coast NWR Complex Comprehensive Conservation Plan and Environmental Assessment, approved in September, 2013^y.

It is noteworthy that 61.1% of the funds for the acquisition of this land came from the Migratory Bird Conservation Fund (MBCF), paid for by Duck Stamps sold to duck hunters and aficionados of the stamp art. The funds are thus fees paid by appreciative users of wetland ecosystems, to the benefit of future generations of all Americans. 16.6% of the cost of the land purchased came from private grants, and 14.9% represents the appraised value of donated tracts of land. Only 7.5% of the cost of acquisition came from congressional appropriation via the Land and Water Conservation Fund (figure 8).

All of these 33,636 acres were obtained from willing donors and sellers, primarily via fee title purchase. Non-profit organizations like the Trust for Public Land, The Conservation Fund, and the National Fish and Wildlife Foundation often purchase and hold lands until the U.S. Fish and Wildlife Service completes due diligence and secures funding for acquisition. Friends, through grants from Houston Endowment, provides funds for pre-acquisition discovery processes. These non-profits provide elasticity to accommodate

the timing needs of the seller and the funding constraints of the buyer. The result is a process that is steadily moving toward the goal of conserving a sustainable amount of Columbia Bottomland Forest ahead of urban encroachment as metropolitan Houston grows south.

Currently, the TMCNWRC is working on the acquisition of twelve tracts of Columbia Bottomland forest, having a total of 21,805 acres, bringing us closer to our goal of 70,000 acres.

The current quantity of land in conservation status is not adequate to protect either the ecosystem or dependent wildlife species. The proposed National Wildlife Refuge Expansion Limitation Act of 2013 would essentially halt the process of preserving this critical amount of hardwood wetland forest, and threaten the dwindling population of migrating songbird species, which are in significant decline^{vi}. Since H.R. 3409 would be retroactive to January 3, 2013, the over 3,800 acres of land acquired since then by the San Bernard NWR would be in jeopardy.

The bottom line is that H.R. 3409, which would stipulate that “The Secretary may not expand any national wildlife refuge except as expressly authorized by law enacted after January 3, 2013”, is a blunt instrument. Congressional oversight is already provided by the Migratory Bird Conservation Act, which funds most of our refuge land acquisition programs. For these reasons, I respectfully request that HF3409 be rejected by this subcommittee and the United States House of Representatives.

I thank you for your time.

Martin (Marty) Cornell

Figure 1: Strategic location of the wildlife refuges of the Texas Mid-coast National Wildlife Refuge Complex

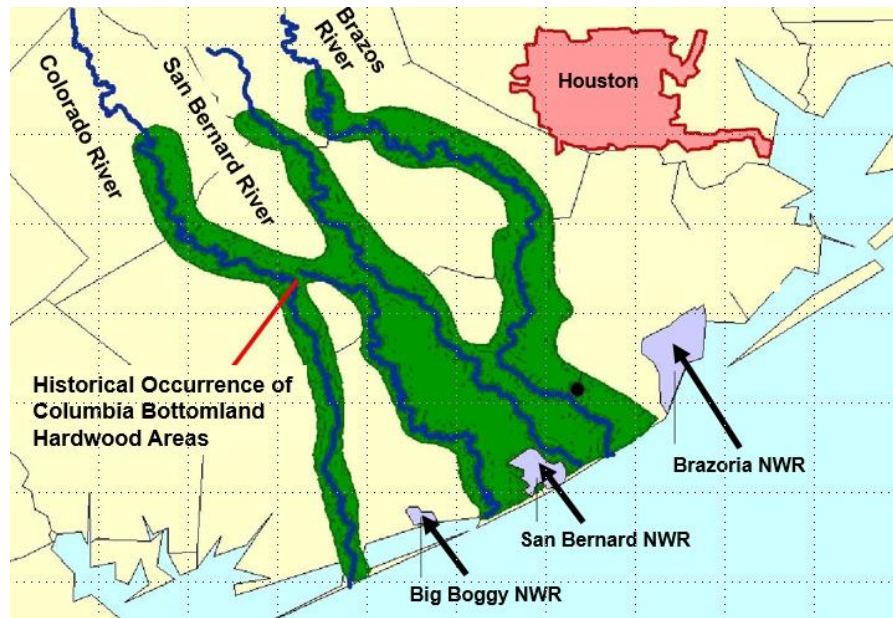


Figure 2: Spring northern migration pathways pass through the Columbia Bottomland Forests

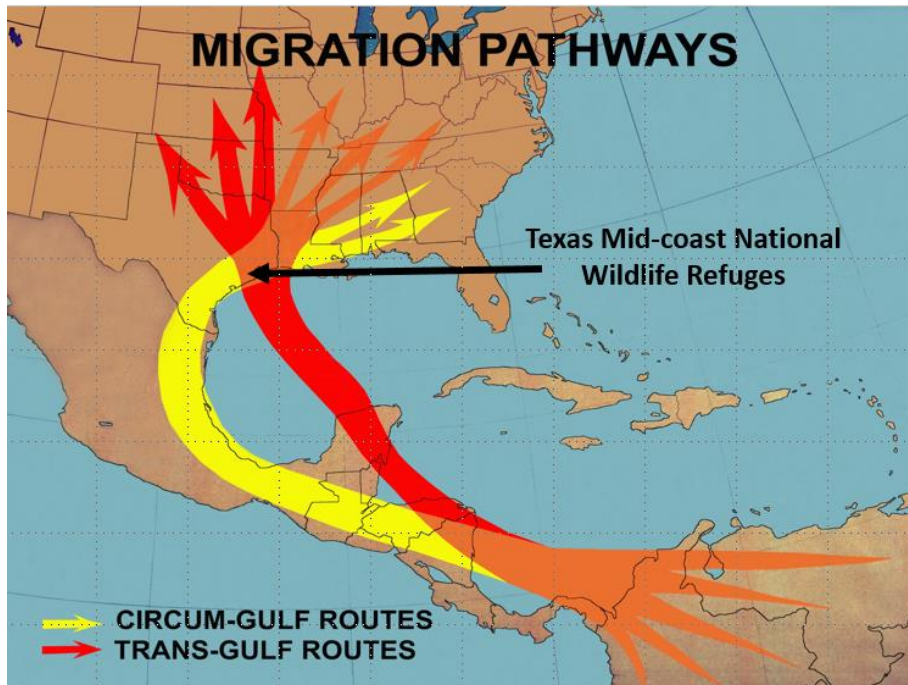


Figure 3: Doppler radar of the northern spring migration of Nearctic and Neotropical birds through the Columbia Bottomland forests. Dr. Sidney Gauthreaux, Jr.¹

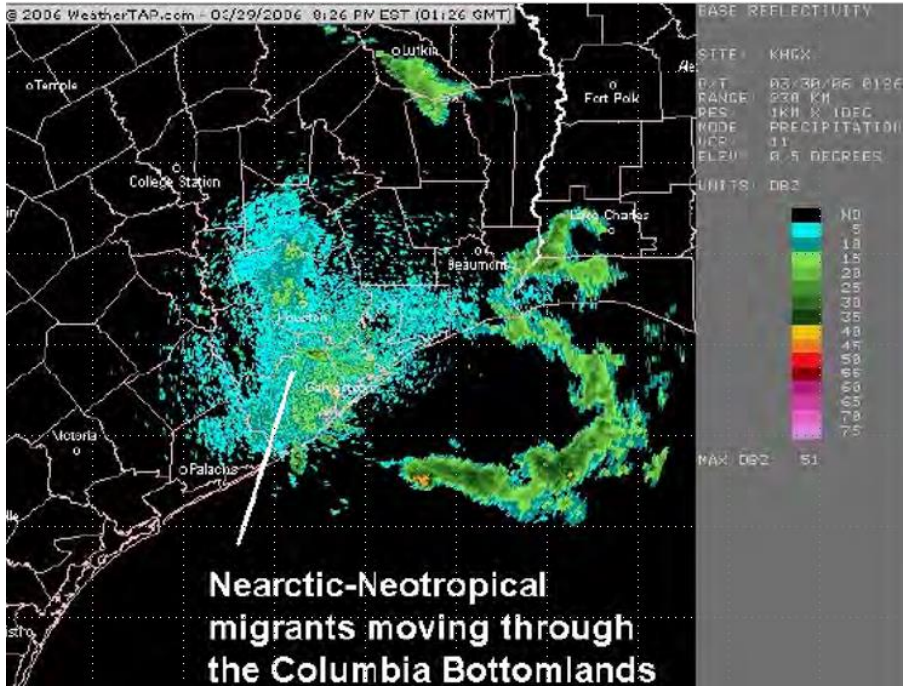


Figure 4: ADA-compliant trail in the Dow Woods Unit of the San Bernard NWR



Allocation of Friends Funds, 1996 - 2014

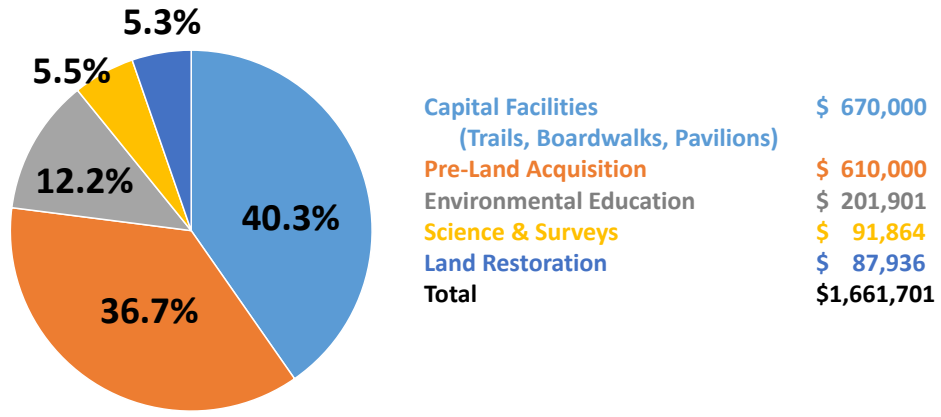


Figure 5

Figure 7: 33,653 acres of acquired and proposed additions to the conserved Columbia Bottomland Forest

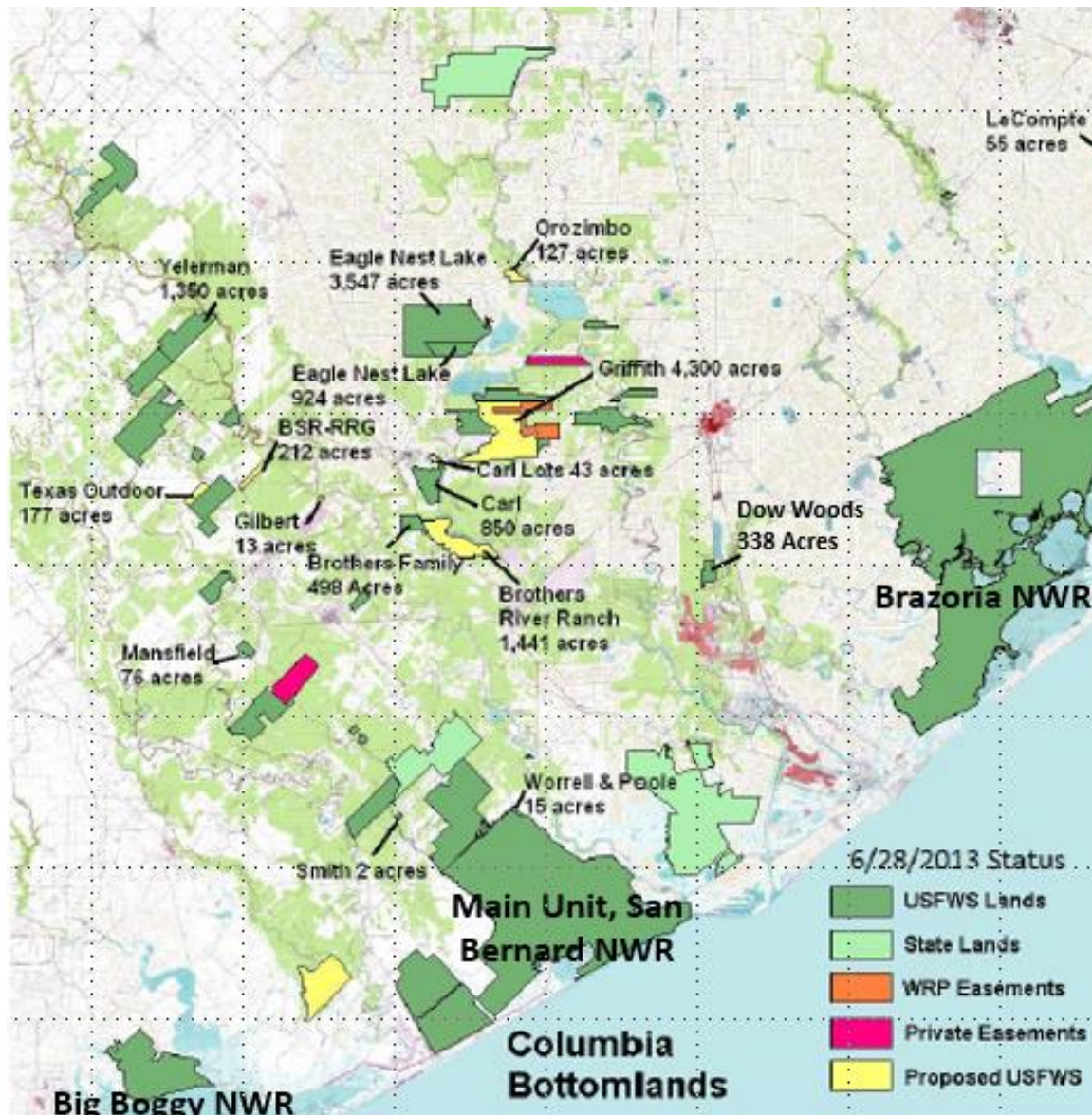
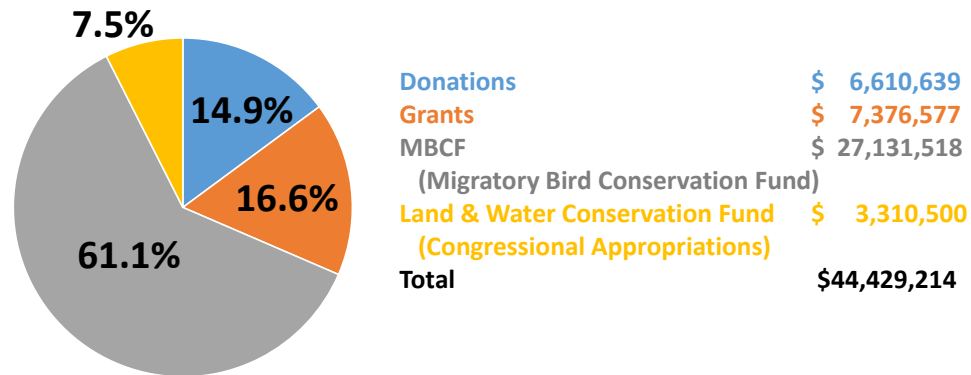


Figure 8

Funding Sources of Columbia Bottomlands Additions, 1996 - 2013



References

ⁱ <http://www.refugefriends.org/>

ⁱⁱ <http://www.fws.gov/southwest/refuges/texas/texasmidcoast/index.htm>

ⁱⁱⁱ Jeffrey J. Buler, Frank R. Moore, and Stefan Woltmann 2007. A MULTI-SCALE EXAMINATION OF STOPOVER HABITAT USE BY BIRDS. Ecology 88:1789–1802. <http://dx.doi.org/10.1890/06-1871.1>

A MULTI-SCALE EXAMINATION OF STOPOVER HABITAT USE BY BIRDS

Jeffrey J. Buler ¹, Frank R. Moore, and Stefan Woltmann ²

Department of Biological Sciences, University of Southern Mississippi, 118 College Dr. #5018, Hattiesburg, Mississippi 39406 USA

Most of our understanding of habitat use by migrating land birds comes from studies conducted at single, small spatial scales, which may overemphasize the importance of intrinsic habitat factors, such as food availability, in shaping migrant distributions. We believe that a multi-scale approach is essential to assess the influence of factors that control en route habitat use. We determined the relative importance of eight variables, each operating at a habitat-patch, landscape, or regional spatial scale, in explaining the differential use of hardwood forests by Nearctic–Neotropical land birds during migration. We estimated bird densities through transect surveys at sites near the Mississippi coast during spring and autumn migration within landscapes with variable amounts of hardwood forest cover. At a regional scale, migrant density increased with proximity to the coast, which was of moderate importance in explaining bird densities, probably due to constraints imposed on migrants when negotiating the Gulf of Mexico. The amount of hardwood forest cover at a landscape scale was positively correlated with arthropod abundance and had the greatest importance in explaining densities of all migrants, as a group, during spring, and of insectivorous migrants during autumn. Among landscape scales ranging from 500 m to 10 km radius, the densities of migrants were, on average, most strongly and positively related to the amount of hardwood forest cover within a 5 km radius. We suggest that hardwood forest cover at this scale may be an indicator of habitat quality that migrants use as a cue when landing at the end of a migratory flight. At the patch scale, direct measures of arthropod abundance and plant community composition were also important in explaining migrant densities, whereas habitat structure was of little importance. The relative amount of fleshy-fruited trees was positively related and was the most important variable

explaining frugivorous migrant density during autumn. Although constraints extrinsic to habitat had a moderate role in explaining migrant distributions, our results are consistent with the view that **food availability is the ultimate factor shaping the distributions of birds during stopover**.

^{iv} U.S. Fish and Wildlife Service and U.S. Census Bureau; 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation—Texas; <https://www.census.gov/prod/2013pubs/fhw11-tx.pdf>

^v http://www.fws.gov/southwest/refuges/Plan/docs/Texas/TMC_CCP_portfolio.pdf

^{vi} Saving Migratory Birds for Future Generations: The Success of the Neotropical Migratory Bird Conservation Act; Compiled by American Bird Conservancy; May 2009; http://www.abcbirds.org/newsandreports/special_reports/act_songbirds.pdf