



# Shade-Grown Coffee and Migratory Birds

## *Shade the Coffee ~ Shelter the Birds*

It is the outright loss of habitat as a result of human population growth and development that is chiefly responsible for bird population declines. Where development is necessary, however, people can make choices to minimize the impacts to wildlife. A notable example is traditional coffee plantations, where coffee shrubs are grown under a canopy of diverse trees. These tropical farms harbor an abundance of birds, including some of the prettiest songbirds that arrive in North America each spring.

### **Where Does Coffee Come From?**

Coffee plants evolved as understory shrubs in the forests of Ethiopia and the Sudan. As people discovered the stimulating beverage made from the seeds of the coffee fruit (coffee “beans”), the cultivation of coffee spread globally, first to the Middle East, then to Europe, and by the 18th century, to Latin America. Coffee thrived in the New World, and since World War II, Mexico, Central America, and northern South America have produced one-third to two-thirds of the world’s coffee.

Until recently, most coffee in the Americas was grown in the shade, in keeping with coffee’s wild ancestry. On shade farms, coffee is grown under existing forest cover, or more often, under a cover of trees expressly planted by the farmer. In addition to shade, the tree cover provides protection from damaging

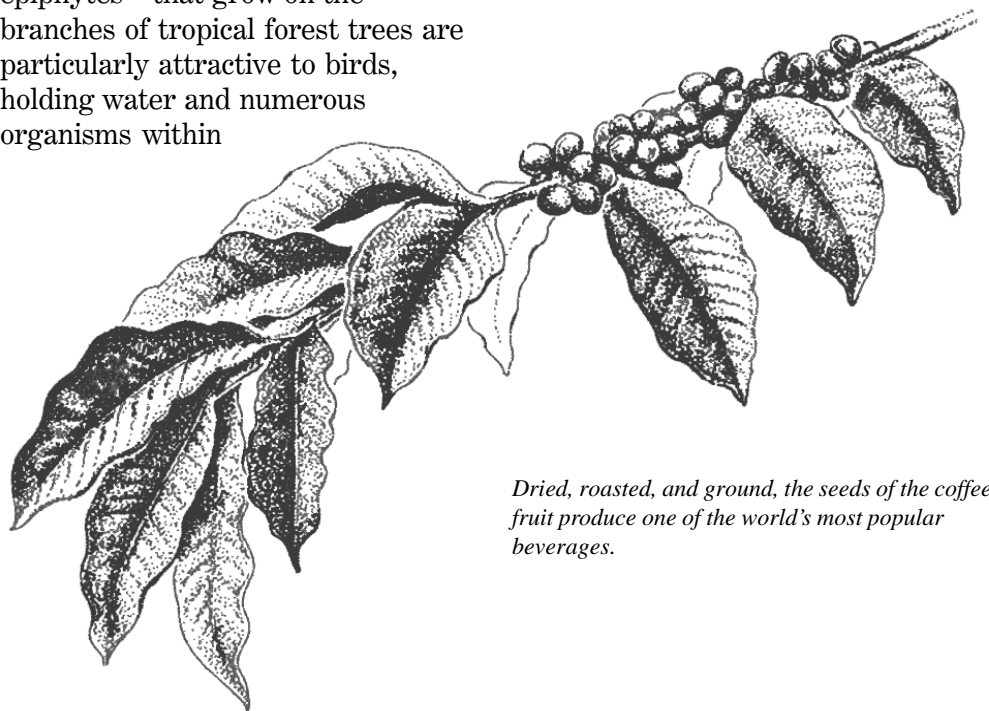
storms and contributes to soil quality. Trees help to hold soil in place, and the roots of some trees fix nitrogen in the soil, while fallen leaves provide a natural mulch. The trees also offer shelter for pest-eating predators and a source of additional forest products, such as fruits, wood, vegetables, nuts, and medicinal plants.

### **Traditional Farms Provide Habitat**

Traditional shade coffee farms include layers of other plants and trees, and thus resemble natural forest. These farms can satisfy the needs of birds dependent on forests or other heavily vegetated areas for food and shelter. The tree foliage and leaf litter provide foraging sites for birds seeking insects, spiders or other small prey. The “air-plants”—epiphytes—that grow on the branches of tropical forest trees are particularly attractive to birds, holding water and numerous organisms within

their leaves. Flowering and fruiting trees provide additional food sources. However, the fruit of the non-native coffee shrubs is not an important food source, and far fewer species are found in the coffee plants than in the forest vegetation overhead.

Studies have shown that coffee plantations with significant shading—greater than 40 percent coverage—by a canopy that is structurally complex and comprised of a diversity of tree species, harbor a variety of birds second only to that found in undisturbed forests. This includes birds that reside in Latin America year-round, as well as birds that bring color and music to North America in the spring.



*Dried, roasted, and ground, the seeds of the coffee fruit produce one of the world’s most popular beverages.*

### Trouble in Paradise

Beginning in the 1970s, due to concerns about a damaging coffee fungus and a desire for higher yields, major changes occurred in the New World coffee industry. Varieties of coffee that would grow when planted densely in the sun were developed, and major portions of coffee cropland were converted to production of these "sun coffees." Farms with these varieties do produce substantially increased yields, but also have significant drawbacks. As tree cover is removed, coffee crops require more chemical fertilizers, pesticides, and herbicides; they become more susceptible to drought; require more frequent plant replacement; and begin to have problems with soil erosion and toxic runoff as well as soil acidification.

When coffee plantations are converted to sun production, the diversity of birds plummets. Full-sun coffee farms host only a fraction—25 to as little as five percent—of the number of bird species on nearby shade farms.

### Make a Difference – Drink Shade Coffee

Next to oil, coffee is the most valuable legal export in the world, with North America accounting for over a third of consumption. Thus, coffee drinkers can make a tremendous contribution to bird conservation by selecting brands produced from shade-grown plants. Over the past five years, many organizations and businesses have been working to promote shade coffee, as well as develop certification criteria so that consumers can be sure that coffee labeled "shade-grown" is truly produced in a fashion beneficial to birds.

Shade coffee is currently marketed as speciality product, but it is not hard to find. With a few phone calls

or on-line searches, and a little taste-testing, you should be able to find a product and provider that's right for your situation as an individual, coffee club member, retailer, or concessioner.

By selecting shade coffee, you will be protecting important wintering habitat for:

- Ruby-throated Hummingbird*
- Wood Thrush*
- Red-Eyed Vireo*
- Black-throated Green Warbler*
- Ovenbird*
- Wilson's Warbler*
- American Redstart*
- Northern Oriole*
- Western Tanager*
- Scarlet Tanager*
- Rose-breasted Grosbeak*
- Indigo Bunting*
- and dozens of other migrating birds!*

**Shade coffee may be a bit more expensive than sun coffee, but aren't these birds worth it?**



**Some Sources of Shade-Grown Coffee**  
Shade coffee is available through a variety of sources:

- The International Migratory Bird Day 2001 Products Catalog, on-line at <http://www.BirdDay.org>
- Progressive grocery stores such as Trader Joe's, Whole Foods Market/Fresh Fields, and Ukrops
- Wildlife-related gift shops such as Wild Bird Centers, Wild Birds Unlimited, and zoo stores
- Coffee shops and cafes
- On-line, using lists provided by:
  - Smithsonian Migratory Bird Center's Coffee Corner (<http://natzoo.si.edu/smbc/Research/Coffee/Coffee.htm>)
  - The Rainforest Alliance's Conservation Agriculture Program (<http://www.rainforest-alliance.org/programs/cap/program-description3.html>)
  - Northwest Shade Coffee Campaign (<http://www.seattleaudubon.org/Coffee/home.html>)
  - Atlanta Audubon Society (<http://www.atlantaudubon.org/pages/sgcfacts.htm>)
  - Other sources on the IMBD website (<http://birds.fws.gov/imbd>)

If you want to see shade coffee in your local grocery store, ask the manager to stock your favorite brand.

**For More Information:**  
**U.S. Fish and Wildlife Service**  
**Division of Migratory Bird Management**  
**4401 N. Fairfax Drive, Room 634**  
**Arlington, VA 22203**  
**703 358 1714**  
<http://birds.fws.gov>

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