Sustainable coffee

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What is sustainable coffee?

• For me:
  – How can I have a cup of coffee that:
    • Minimizes environmental impacts
    • Keeps environmental resources and processes intact
    • Supports livelihoods in developing countries
Sustainable shopping: here’s how to find coffee that doesn’t cost the Earth

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With so many choices for coffee, it’s hard to know which is the environmentally healthy option. Shutterstock

Shopping can be confusing at the best of times, and trying to find environmentally friendly options makes it even more difficult. Welcome to the first instalment of our Sustainable Shopping series, in which we ask experts to provide easy, eco-friendly guides to purchases big and small.

The morning coffee ritual is serious business; Australians drink roughly 16.3 million coffees a day. Plenty of news coverage has been devoted to its health benefits and cultural significance, but how much do you know about the environmental cost of your daily latte?
Shade Coffee: A Disappearing Refuge for Biodiversity

Shade coffee plantations can contain as much biodiversity as forest habitats

Vette Perfecto, Robert A. Rice, Russell Greenberg, and Martha E. Van der Voort

Within the expanding agricultural frontier in the tropics, one can find a variety of small, managed forest patches and traditional agricultural systems, which provide a refuge for forest-dwelling organisms. These managed habitats are frequently overlooked as potential areas of biodiversity conservation (Pimentel et al. 1992). Furthermore, the conservation biology literature often refers to forest reserves as islands in a sea of devastation, in which the sea is formed by agriculture. Although chemically intensive monocultural systems may fit well with this perception of low biodiversity, many other agro-ecosystems, especially in the tropics, are characterized by high vegetational diversity. One such agroecosystem is coffee, when managed with traditional cultural practices. This popular beverage, used worldwide for centuries, constitutes a major source of household income and foreign exchange for many tropical countries, especially in Latin America.

The importance of shade coffee as a refuge for biodiversity may not be in the total land it involves, but in its location in areas that have been particularly hard hit by deforestation.

Coffee was introduced into the New World by the Dutch in 1723 (Wrigley 1988). During the twentieth century it has reached considerable importance in the world market as an export crop. Production has tripled in northern Latin America since World War II, and area under cultivation has nearly doubled (UNPAO Production Yearbooks).

It is hard to overestimate the importance that coffee production and exportation has had for northern Latin America. More than 32% of the world’s coffee comes from this region, where it is the leading source of foreign exchange. Although coffee is produced on only 7.4% of the total arable land, coffee lands at present take up approximately 44% of the area of permanent cropland.
Birds (Greenberg et al. 1997)  
Ants (Perfecto & Vandermeer 1996)  
Butterflies (Perfecto et al. 2003)  
Epiphytes (Hietz 2005)  
Mammals (Gallina et al. 1996)  
Food plants  

+ Biodiversity conservation
Less erosion (Ataroff & Monasterio 1997)
More carbon (Soto-Pinto et al 2010)
Less nutrient leaching (Tully et al. 2012)
Landscape connectivity (Rueda et al. 2014)

+Ecosystem function
Vittoria's blend of roasted Rainforest coffee helps support farmers build a sustainable future while protecting the environment. Vittoria is the choice of award winning restaurants & cafes.
2.8 Farms with Agroforestry Crops located in areas where the original natural vegetative cover is forest must establish and maintain, as part of the conservation program, permanent shade distributed homogenously throughout the plantations; the shade must meet the following requirements:

a. A minimum of 70 individual trees per hectare that must include at least 12 native species per hectare.

b. A shade density of at least 40% at all times.

c. The tree crowns must comprise at least two strata or stories.
Every Coffee served at McCafé® is made only with beans sourced from Rainforest Alliance Certified™ farms.
FAIRTRADE & ORGANIC COFFEES

WILD NEW GUINEA
Grown wild in the highlands of New Guinea, this coffee is hand picked and sold by the roadside for cash income. Brilliant through a stovetop, it is a strong, fruity coffee with a clean taste. The aroma is amazing! Due to the geographical remoteness this is an uncertifiable, wild grown organic coffee.

MEXICAN CHIASAS
ORGANIC Certified (O.C.I.A.)
High grown Arabica from Chiapas State. This striking coffee has a tantalising toasty taste with a crisp sweet riesling finish.

EAST TIMOR MAUBISSE
ORGANIC Certified (O.C.I.A.)
A high grown arabica with a heavy rich liquor, well balanced creamy character and a chocolatey finish. This is a shade grown coffee that provides valuable habitat for migratory birds and other native wildlife.

OKAPA ORGANIC
ORGANIC Certified (O.C.I.A.)
Wild grown coffee preserves the lush jungle, while providing local tribes people with a sustainable income. Big body, bold aroma and a heavenly honey finish. Very Exotic.

COLOMBIAN EXCELSIOR
ORGANIC Certified (O.C.I.A.)
From COSURCA Co-op, in South West Colombia. Very full body, balanced, with mellow caramel finale. If you love South American Coffee, you'll fall for this one.

COSTA RICA
ORGANIC Certified (O.C.I.A.)
A Co-Operative grown low altitude Arabica with smooth medium body, winey taste & succulent blackcurrant hint.

DOMINICAN REPUBLIC
ORGANIC Certified (O.C.I.A.)
Displays a mellow chocolate praline flavour with deep rich body. This shadegrown Arabica is a Divine Dominican indeed!

PERU CAFE FEMENINO
FAIRTRADE Certified ORGANIC Certified (O.C.I.A.)
From the Pencachi region of Peru, this coffee is produced by women. Sweet and silky with low acid, smooth and full in the cup, this coffee is a commitment to Quality and Equality in life. 50 cents from every Kilogram sold (in addition to the FAIRTRADE premium) goes directly back to the women growers in Peru.

NICARAGUAN ORGANIC
FAIRTRADE Certified ORGANIC Certified (O.C.I.A.)
A tasty tonic with neatness on the tongue, leaving a succulent, succulent, silky mouthfeel. A sustainably grown coffee from a farmers cooperative using progressive organic methods under lush shade trees.

ETHIOPIAN SIDAMO
FAIRTRADE Certified ORGANIC Certified (O.C.I.A.)
From the source... Dense clean butter biscuit in texture with dusted cocoa and praline hints. Organic indulgence!

PERU ORGANIC DECAF
SWISS WATER FILTER PROCESS
FAIRTRADE Certified ORGANIC Certified (O.C.I.A.)
One of the best decafs we have ever tasted. Still balanced and still displaying all the praline and fruit hints of our Peru Cafe Fomonino.

JULIET BLEND
FAIRTRADE Certified ORGANIC Certified (O.C.I.A.)
Seductive tones of warm butter melt enriched by spiced milk cocoa, this low acid, big bodied blend will embrace your coffee passion.

F.T.B.
FAIRTRADE Certified ORGANIC Certified (O.C.I.A.)
Our First FAIRTRADE Certified blend. A coffee with rich, succulent and creamy with a lingering cocoa plum finish. Great through an espresso machine and 100% FAIRTRADE Certified.

O BLEND
ORGANIC Certified (O.C.I.A.)
Ethically sound caffeine from the global arena. Three Certified Organic Coffees in one cup. Creamy smooth caramel flavours with a long clean finish.
From NASAA:

- promoting biodiversity by growing a variety of crops
- preventing soil erosion and improving soil quality
- conserving energy
- protecting wildlife, stream banks and watersheds
- avoiding the use of synthetic or artificially produced pesticides, herbicides, fertilisers or GMOs (genetically modified, transgenic organisms).
The world of logos

Cultivation

Import

Roasting & Packaging
Intensive agriculture as an alternative?

Farmers don’t have a production target
Low prices increases demand
High profits lead to opportunity costs in natural habitat
Coffee in Ethiopia
Forest coffee and birds

\[ R^2 = 0.3234 \]
Farm coffee and trees

![Graph showing the relationship between coffee occurrence and tree species diversity.](image)

- **Coffee occurrence (#quadrats)**
- **Tree species (n)**

- $R^2 = 0.2397$
Farm trees and birds

R² = 0.4455

Bird species (n) vs. Tree species (n)
Effects of Coffee Management on Deforestation Rates and Forest Integrity

KRISSOFER HYLANDER,§ SILESHI NEMOMISSA,† JOSEFIEN DELRUE,*
AND WOLDEYOHANNES ENKOSA‡
Conclusions – from Ethiopia

• On farm and in-forest activities are both important

• Coffee cultivation has mixed effects
  – Positive role of rehabilitation in farms
  – Negative in forests, but a trade-off exists
  – Coffee ensures forest longevity
Overall suggestions

• ‘bird friendly’ certification promotes environmental protection

• Organic certification capture many similar elements

• Agricultural intensification is promising but governance structures to control economic incentives aren’t in place

• Ethiopia presents different challenges – understanding landscape history may be key to best management
Thank you!