

Weekly Reading/Viewing

Please review the assigned material before class.

All items are posted on the Canvas site. Topics & readings are subject to change based on current events; changes will be announced via Canvas.

WEEK 1

Wk 1-2: Course Introduction

Read: None

WEEK 2

Wk 2-1: Historical Narratives

Goal: To introduce and discuss how historical narratives by the first Europeans to visit the tropics have shaped contemporary perceptions of tropical rain forests and the colonial roots of tropical biology

Read: Excerpts from Historical Narratives [6 pages: [link](#)]

Watch: John Maggio, Hannah Olson, Ark Media, John Maggio Productions, & American Experience Films (Producers), & Maggio, J. (Director). (2018). Into the Amazon. [Video/DVD] Public Broadcasting Service. Retrieved from <https://video.alexanderstreet.com/watch/into-the-amazon>

Wk 2-2 Rain Forest Imagery in Art & Literature

Read: Excerpts from Literature/Poetry [link](#) (5 pages)

Review: Images of artwork [[link](#)] (4 pages)

WEEK 3

Wk 3-1 The Rain Forest in Pop Culture

Goal: To compare the presentations of rain forests by the global film and music industry and evaluate how these depictions influence perceptions of tropical countries & people.

Read: Jolly, Priscilla. 2021. 'Godzilla vs. Kong': Monster movies evoke adventure but also 'dangers' of tropics. The Conversation. [[link to read online](#)] (4 pages)

Read: Rose, Steve. 2016. "From Tarzan to Avatar: the problem with 'the white man in the jungle' ". The Guardian [[link to read online](#)] (newspaper story, 5-10 min. read)

Wk 3-2 What (and where) is a Rain Forest?

Goal: To learn the different ways biologists define the "tropics" and how the structure and dynamics of tropical rain forests differ from those of forests in other parts of the world.

Watch: Why Does Earth Have Deserts? [[link to video](#)]; 2 min long]

Watch: Emma Napper, British Broadcasting Corporation, ZDF, T., Tencent, & France Télévisions (Producers), & Napper, E. (Director). (2016). Jungles. [Video/DVD] BBC Worldwide. Retrieved from <https://video.alexanderstreet.com/watch/Jungles-2>

WEEK 4

Wk 4-1 What else is a Rain Forest?

Goal: To understand the geological history of tropical rain forests, how climate, fire, and geological history drive the tipping point between forests and savannas, and how this biogeographic, geological, and climatic history shaped the evolution of tropical plants and animals

Read: “Ch. 4: Finding animals in the rainforest” from Kricher, J.C. (2017). The new neotropical companion. In *The New Neotropical Companion*. Princeton Univ. Press (13 pp)

Wk 4-2 Patterns of Biodiversity 1

Goal: An overview of (a) diversity gradients and (b) local patterns of species richness and abundance in tropical forests and (c) how these differ from the temperate zone

Read: We will be using iNaturalist in class. You can familiarize yourself in advance by reviewing the iNaturalist website <https://www.inaturalist.org/> after reading this: Matthew Earl Boone and Mathieu Basille. Using iNaturalist to contribute your nature observations to science (UF EDIS Document WEC413) [link]

Watch: Why Are There So Many Species Near the Equator? [link to video, 4:50 long]

WEEK 5

Wk 5-1 Patterns of Biodiversity 2

Goal: To observe and catalog the diversity of plant and animal life forms that can be found in rain forests and review hypothesized mechanisms for the origins of tropical diversity.

Watch: Ingrid Kvale, & British Broadcasting Corporation (Producers), & Kvale, I. (Director). (2021). *Borneo: Sacred Forest*. [Video/DVD] BBC Worldwide. Retrieved from <https://video.alexanderstreet.com/watch/borneo-sacred-forest>

Wk 5-2: Origins of Tropical Biodiversity

Goal: To understand how interspecific interactions led to the (co)evolution and diversification of tropical biodiversity

Read: “Ch. 3: The Realm of Plants” from Kricher, J. C. (2017). The new neotropical companion. In *The New Neotropical Companion*. Princeton University Press. (18 pp).

Watch: An introduction to Army Ants: [link to video, 9 min long].

Watch: See also this Army Ant Video by the BBC: [link to video, 3 min long].

Watch: A closer look at the Army Ant Birds: [link to video, 14 min long].

WEEK 6

Wk 6-1: Maintenance of Tropical Biodiversity

Goal: To review the biotic and abiotic mechanisms in tropical rain forests that permit the coexistence of so many species.

Watch: Is this the biggest flower in the world? “BBC Earth: Corpse Flower Stinks of Death” [[link to video](#), 4 min long].

Watch: A slightly less dramatic video in which you can get a better idea of the flower’s size: [[here](#), 3 min long]

Watch: Maybe this is the biggest flower: The Titan arum [[link to video](#), 2 min long]

Wk 6-2: The Paradox of Luxuriance & Forest Disturbance

Goal: To understand how such a productive biome can be built on such low-quality soils, and explore the implications of this “Paradox of Luxuriance”.

Read: Langewiesche, William. 2022. “The War for the Rainforest.” NY Times. [[read online](#)]

WEEK 7

Wk 7-1 Humans are Part of Rain Forests

Goal: To understand the history of human occupation of rain forests including the contemporary demographic transition from rural to urban occupation; to review the different ways in which humans have historically modified rain forests and how this has shaped current rain forest biodiversity.

Watch: Kristine Allington, Michael Amundson, Linithd Aparicio, & Caitlin Saks (Producers), & Townsley, G. (Director). (2023). Ancient Builders of the Amazon. [Video/DVD] Public Broadcasting Service. Retrieved from <https://video.alexanderstreet.com/watch/ancient-builders-of-the-amazon>

Wk 7-2 Narratives Revisited: Biology, History, Fiction, Reality

Watch: Anthony Bourdain’s Parts Unknown: Congo (S1E8) [[link to video](#), 50 min long].

Read: Bourdain’s Field Notes: Congo [[read online](#), 5 min read].

Listen: NPR’s Throughline Podcast: “There Will Be Bananas” 1. NPR’s Throughline Podcast: “There Will Be Bananas” [[listen online](#), 56 min].

WEEK 8

Wk 8-1 JUNGLE FILM FESTIVAL

Read: 1-2 readings TBD based on movie chosen.

Wk 8-2 How much tropical rain forest is there?

*Goal: To learn how forest cover is defined and estimated and how it varies globally

Read: Nolen, Stephanie (Reporting) with Elkaim, Aaron Vincent (Photographs). 2018. “Inside the Amazon’s Deforestation Crisis”. The Globe and Mail. [[read online](#), 20 min read].

WEEK 9

Wk 9-1 How much tropical rain forest have we lost?

Goal: To use forest cover data to estimate rates of tropical forest loss over time

Read: Searcey, Dionne (reporting) and Gilbertson, Ashley (photographs). 2022 “Raft by Raft, a Rainforest Loses Its Trees” NY Times. [[read online](#), 10 min read].

Read: Devouring the Rain Forest. Washington Post. [[read online](#), 20 min read].

Wk 9-2 Drivers & Consequences of Deforestation: Mining, Timber, Fire, Infrastructure

Goal: Learn (a) how deforestation and other human activities alter the structure & functioning of rain forests, and (b) compare how these drivers differ between the African, American, and Asian tropics.

Read: Andreoni, Manuela, Blacki Migliozi, Pablo Robles and Denise Lu. Photographs by Victor Moriyama. 2022. “The Illegal Airstrips Bringing Toxic Mining to Brazil’s Indigenous Land”. NY Times. [[read online](#), 15 min read].

Read: Andreoni, Manuela. 2022. “Stopping wildfires before they start”. NY Times. [[read online](#), 10 min read].

WEEK 10

Wk 10-1 Drivers & Consequences of Deforestation: Agriculture

Goal: Continue learning (a) how deforestation and other human activities alter the structure & functioning of rain forests, and (b) compare how these drivers differ between the African, American, and Asian tropics.

Read: Robles, Pablo, Anuradha Raghu, Adam Majendie and Jin Wu 2021. “The World’s Addiction to Palm Oil Is Only Getting Worse”. Bloomberg News. [[read online](#), 10 min read].

Read: Mason, Margie & McDowell, Robin. 2020. “Palm oil labor abuses linked to world’s top brands, banks”. Associated Press. [[read online](#), 10 min read].

Wk 10-2 Climate Change and Tropical Forests

Goal: Climate change and Tropical Forests To understand the relationship between tropical forests, deforestation, and the global climate cycle.

Watch: BBC News: Amazon rainforest: ‘Once it’s gone, it’s gone forever’ (interview with Erika Berenguer). [[link to video](#), 3 min long].

Read: Pearce, Fred. 2018. “Rivers in the Sky: How Deforestation Is Affecting Global Water Cycles.” Yale360. [[read online](#), 10 min read].

WEEK 11

Wk 11-1 Addressing Climate Change

Read: Serkez, Yaryna. 2020. Every Place Under Threat. NY Times. [[read online](#), 10 min read].

Read: learn about the EN-ROADS simulator we will be using in class at this [[link to website](#), 15 min read]. You can even start experimenting with it here: [[link to site](#)].

Wk 11-2 Consumer Choices

Goal: To understand how global production and chains and consumer demand in Europe and North America influence patterns of deforestation in tropical countries.

Read: Carodenuto, Sophia. 2021. “Chocolate fix: How the cocoa industry could end deforestation in West Africa”. The Conversation. [[read online](#), 10 min read].

Read: Lawal, Shola. 2020. “Our Endless Appetite For Chocolate Has Bitter Environmental Consequences” Huffington Post. [[read online](#), 10 min read].

Read: Hunt, Chris and Premathilake, Rathnasiri. 2018. “Prehistoric people started to spread domesticated bananas across the world 6,000 years ago.” The Conversation. [[read online](#), 5 min].

Read: Optional: Mufson, Steven and Georges, Salwan. 2019. “The trouble with chocolate” Washington Post [[read online](#) to see the amazing maps, pictures, and data visualizations.

Read: Optional: Williams, Wyatt. 2021. “How Your Cup of Coffee Is Clearing the Jungle”. NY Times. [[read online](#)] Longer, but really gripping and the article includes a link to an audio version if you prefer to listen to it.

WEEK 12

Wk 12-1 DURIAN FEST 2022

Goal: To learn about the global market in tropical fruit crops and the economic impact of tropical fruit production in Florida.

Read: Weintraub, Karen. 2019. “They’re Smelly and Spiky, and They Need Bats to Pollinate Them”. NY Times. [[read online](#), 5 min read].

Read: Wharton, Rachel. 2020. How the Tip of Florida Became a Tropical-Fruit Paradise. Atlas Obscura. [[read online](#), 5 min read].

Read: Frías, Carlos. 2022. “Oddly colored and somewhat phallic: How Miami’s rare tropical fruit went TikTok viral.” Miami Herald. [[read online](#), 5 min].

Wk 12-2 International Frameworks

Goal: To learn about the major local, national, and multi-national approaches to reducing deforestation by comparing their efficacy and socioeconomic impacts. REDD and Payment for Ecosystem Services.

Read: UN-REDD Programme: An introduction to REDD+ [[link](#)].

Note: this is a slide deck designed to introduce the REDD+ framework to a general audience. The content is exceptional, but don’t just read the material – think about how it is being presented (graphics, etc.) and if it effectively communicates their message. I’ve asked you do this not just to prepare for today’s lesson, but because it will be useful for your Final Project (TL;dr... the presentation is awful: busy slides, too much text, overly complicated graphics... we’ll talk about how it could be improved).

WEEK 13

Wk 13-1 Local Initiatives, Empowered Communities, Activism, & Philanthropy

Goal: To learn about how local communities are engaged in rain forest conservation and sustainable development efforts in the tropics and beyond.

Read: Ruth Maclean (reporting, writing), Caleb Kabanda (reporting), and Nanna Heitmann (photography). 2022. “What do the protectors of Congo’s peatlands get in return?” NY Times. [[read online](#), 10 min read].

Read: Kimbrough, L. 2021. “How settlers, scientists, and a women-led industry saved Brazil’s rarest primate”. Mongabay.com [[read online](#), 10 min read].

Read: Don’t underestimate what one person can do on their own: “BBC World Service: The man who grew his own rainforest” [[link to video](#), 5 min long] (keep an eye out for the Euglossine bees we learned about earlier in the semester...you can see them collecting scented oil from flowers at 2:04).

Read: Arellano, Astrid and Sierra Praeli, Yvette. 2022. “A look at violence and conflict over Indigenous lands in nine Latin American countries”. Mongabay.com . [[read online](#), 20 min read].

Wk 13-2 Protected Areas

Goal: To learn about different global categories of protected areas, the importance of protected areas in the tropics for conserving forest, and how the threats to protected areas vary regionally and globally.

Read: Dasgupta, Shreya (with research by Annika Schlemm & Zuzana Burivalova). 2017. “Do protected areas work in the tropics?” Mongabay.com. [[read online](#), 25 min read].

WEEK 14

Wk 14-1 Project Work Day.

Read: None

Wk 14-2 No class: Thanksgiving Holiday

Read: None

WEEK 15

Wk 15-1 Forest Restoration & Regeneration

Goal: To learn the difference between passive regeneration and active restoration and assess evidence for whether they can be used to reverse the effects of deforestation

Read: Medici, Patricia. 2015 TED Fellows Talk. “The coolest animal you know nothing about...and how we can save it”. [[link to video](#), 11:20 min long].

Read: “Do tapirs defecate in the woods?” 2019. The Economist [[read online](#), 5 min read].

Read: Come prepared to make some money: we’re looking into the economic benefits of setting aside land (or not) for conservation. To prepare, look this document over before class: [[link](#), 10-15 min read].

Wk 15-2 Tropical Rain Forests and Global Health

Goal: To learn about the relationship between deforestation and the emergence and spread of tropical diseases like Zika and Malaria from the tropics to other regions of the globe.

Read: Lavinas Picq, Manuela 2020. "Spreading Faith, and Disease". NY Times. [[read online](#), 15 min read].

Read: Vittor, Amy, Gabriel Zorello Laporta, and Maria Anice Mureb Sallum. 2020. How deforestation helps deadly viruses jump from animals to humans. The Conversation. [[read online](#), 15 min read].

Read: Kuchipudi, Suresh V. 2020. Why so many epidemics originate in Asia and Africa – and why we can expect more. The Conversation. [[read online](#), 10 min].

WEEK 16**Wk 16-2 Rain Forest Headlines / What will you do?**

Goal: To learn how journalists based in different countries or different global audiences chose and cover stories about rain forests and deal with the risks of covering this beat.

Read: Nicas, Jack (reporting) and Moriyama, Victor (Photos, Video). 2022. Inside the Amazon Journey That Left a Journalist and an Activist Dead. NY Times. [[read online](#), 15 min read]

Read: Jennifer Weeks. Ending Amazon deforestation: 4 essential reads about the future of the world's largest rainforest. The Conversation [[link](#)] (4 pages)