

ANTH 42 Primates in Nature

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About the course

Goals:

- Give you an idea of what the Order Primates is all about, both as primates and as an example of a mammalian Order in general - what's biodiversity up close? Get a 'feel' for them (us)
- Introduce the theories and methods of behavioral ecology (how do we know what we know, and why do we think what we think, concerning primates)
- Teach you enough specifics about primates to prepare you for upper-division coursework on primates (and wildlife conservation, though less directly)
- Enable you to impress heck out of your family on your next trip to the zoo.

About the course

Format:

- I have a tendency to get caught up in talking, and rely on you to bring me down -- ask questions!
- Because the goals include "getting a feel for primates", I'll be showing a fair amount of video & slides. The visuals are important for 'subliminal' understanding of apes, monkeys and prosimians.
- There will be quizzes almost every day, RATHER than midterms. You'll be able to drop the one of your choice (I assume the lowest score).

These start next Tuesday, and will happen at start of each class.

About the course

Note:

- The course is taught from an evolutionary perspective. That can be an issue for some people (I teach seminars on the creation/evolution issue). A geneticist named Dobzhansky noted "*Nothing in biology makes sense except in light of evolution*" but that doesn't mean you have to accept evolution to "do biology". Think of it like this: A mechanic doesn't need to understand aerodynamics, materials science, marketing or design; she just fixes cars. But to truly understand cars, make new insights into their design, and know why some models succeeded and some failed, it helps to know all that stuff. Similarly, an MD can treat people without understanding evolutionary theory...
- You don't have to believe it - I do respect alternative views and am not trying to convert anyone. Just learn it, answer quiz questions from within the framework, and everything will be fine.

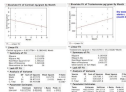
Along those lines ...

Creation Science, Intelligent Design, and Neodarwinian Evolution

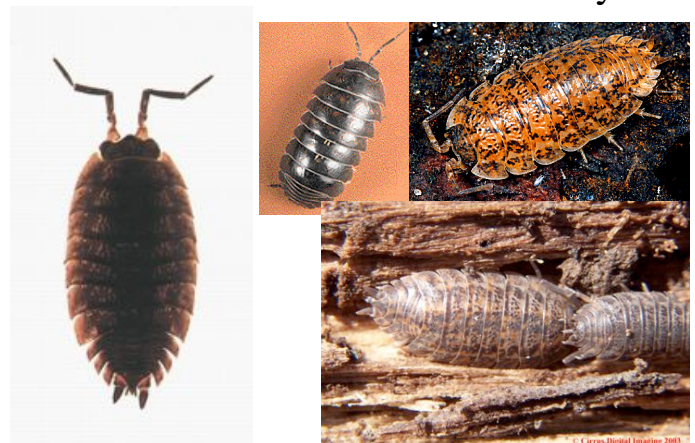
ANTH 87 D00, Section ID: 685313, Location: SSB 105
Tuesdays, 5:00 p.m. to 6:50 p.m. Seminar will meet March 30; April 6, 13, 20.
This seminar is intended for people trying to understand the evidence concerning how we got here. There will be no required "right answer"; the goal is to understand the arguments, their implications, and the data underlying them. Exact content will be collectively decided at the first meeting.

Human Evolution for Skeptics

ANTH 87 E00, Section ID: 686557, Location: SSB 105
Mondays, 5:00 p.m. to 6:50 p.m., Seminar will meet March 29; April 5, 12, 19.
Why do scientists think humans and chimpanzees share a common ancestor that lived in Africa some 5-7 million years ago? We'll explore the evidence and the role it plays in current debates about Intelligent Design and creationism, without insisting students accept it.



Primates in nature: Taxonomy





Primates in nature: Taxonomy



Kings Kingdom
Peer Phylum
Closely Class
Over Order
Fine Family
Gray Genus
Spots Species



A family tree (primates)

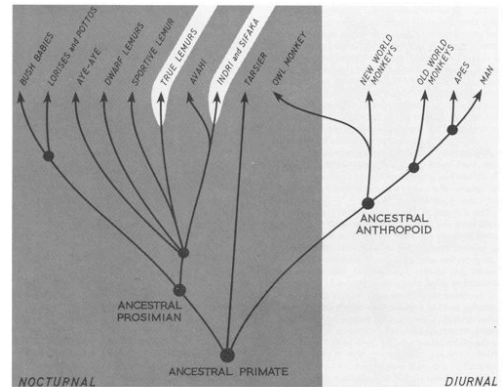
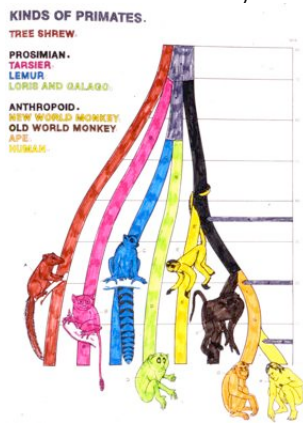


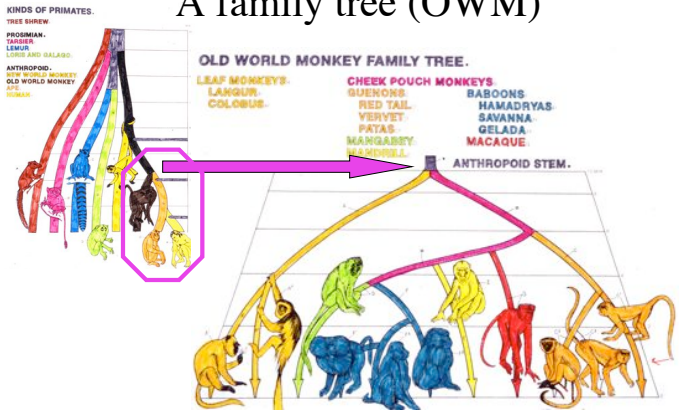
FIG. 1.11 The prosimians are nocturnal and the anthropoids diurnal. The tarsier is allied to the prosimians in this respect. (After R.D. Martin).

A family tree (primates)

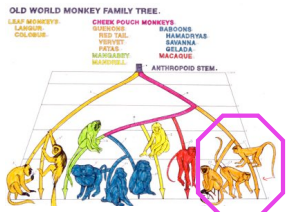


Another way to look at it

A family tree (OWM)



Another family tree (guenons)



Family trees tell stories, and stories can be controversial

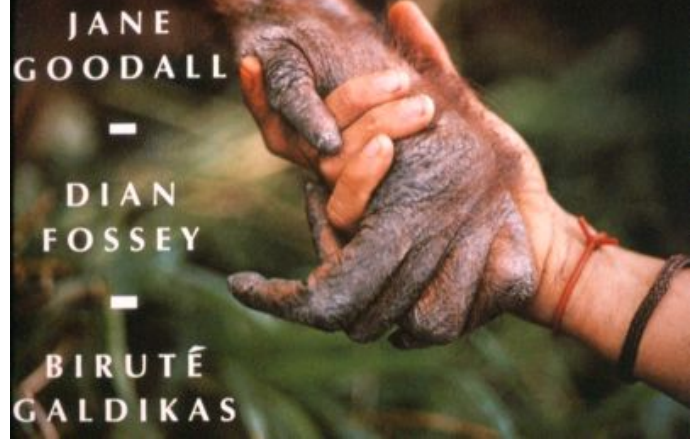
But however we got here, nonhuman primates provide...

The EVOLUTIONIST states that all life gradually evolved from a single cell, which had evolved from dead matter.

Moments of commonality



Points of contact

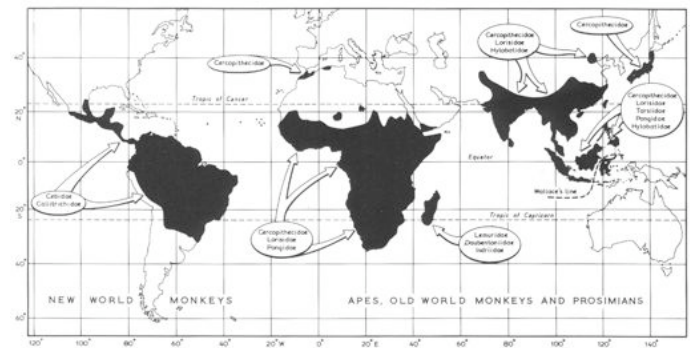


Clues to understanding ourselves



Primate distribution

FIG. 1.1 Distribution of non-human primates by families.



13 PROSIMIANS—Prosimii
13 Lorises, Potos, and Bush Babies—Loroidae
14 Lorises and Potos—Loridae



18 Bush Babies—Galagoidea



27 Lemurs—Lemuroidea
28 Dwarf Lemurs—Chlorocebus



34 Sportive Lemurs—Megaladapidae



38 Lemurs and Bamboo Lemurs—Lemnidae



47 Indridae—Indridae



51 Aye-aye—Daubentonidae



52 Tarsiers—Tarsiidae
53 Tarsiers—Tarsiidae



Prosimians

Africa, Asia, and especially Madagascar



57 HIGHER PRIMATES—Anthropoidea
59 Neotropical Primates—Platyrrhini/Ceboloidea
59 Marmosets and Tamarins—Callitrichidae



81 Cebids—Cebidae
83 Night Monkeys—Aotinae



85 Titi Monkeys—Callitrichinae



93 Capuchins and Squirrel Monkeys—Cebinae



101 Sakis and Uacaris—Pitheciinae



107 Howler Monkeys—Alouattinae



112 Spider Monkeys and Woolly Monkeys—Atelinae



NWM

Central and South America

119 Old World Monkeys—Catarrhini/Cercopithecoidea
119 Macaques, Baboons, Guenons, and Colobines—Cercopithecoidea

120 Cheek Pouch Monkeys—Cercopithecoidea



153 Guenons—Cercopithecus



169 Leaf-eating Monkeys—Colobinae



207 Apes—Catarrhini/Hominoidea

208 Lesser Apes (Gibbons)—Hylobatidae



219 Great Apes—Pongidae and Hominoidea
220 Orangutans—Pongidae

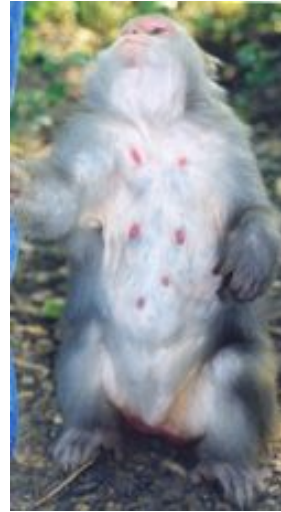


224 Gorillas, Chimpanzees, and Humans—Hominoidea



OWM & Apes

Africa, Asia, and global



What do this monkey
and Krusty the Clown
have in common?

Primate characteristics include

Grasping hands

Nails (not claws)

Clavicle (collar bone)

Binocular vision

Enclosed eye sockets ... (& more)

And, overall similarity to other
Primates. To get feel for that, video ...



Life in the Trees - excellent intro, even if we don't finish it.