Quote – Holmes on 'Entomology'

" I suppose you are an entomologist?"

" Not quite so ambitious as that, sir. I should like to put my eyes on the individual entitled to that name.

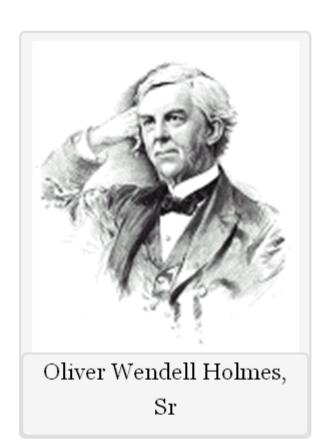
No man can be truly called an entomologist, sir; the subject is too vast for any single human intelligence to grasp."

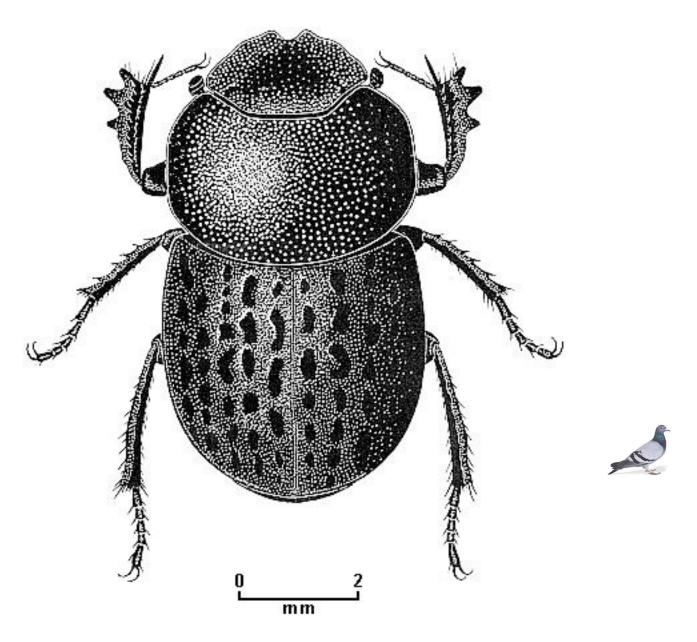
Oliver Wendell Holmes, Sr

The Poet at the Breakfast Table.

Image credit : Wikimedia Commons.

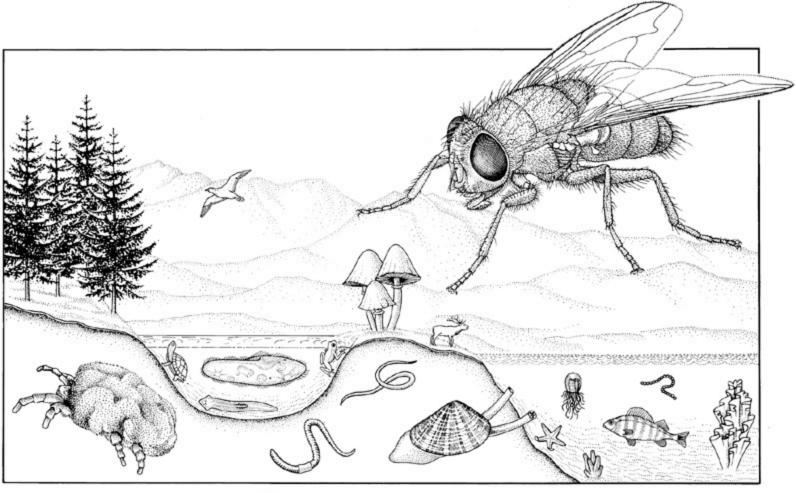
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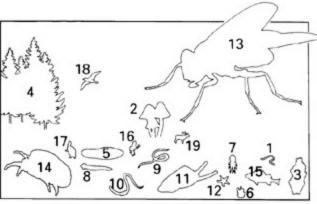




Insects-->800,000 species

Birds--about 8,000 species





- 1 Prokaryotes
- 2 Fungi
- 3 Algae
- 4 Plantae (multicellular plants)

- 5 Protozoa
- 6 Porifera (sponges)
- 7 Cnidaria (jellyfish, corals, etc.)
- 8 Platyhelminthes (flatworms)
- 9 Nematoda (roundworms)
- 10 Annelida (earthworms, leeches, etc.)
- 11 Mollusca (snails, bivalves, octopus, etc.)
- 12 Echinodermata (starfish, sea urchins, etc.)
- 13 Insecta
- 14 Non-insect Arthropoda
- 15 Pisces (fish)
- 16 Amphibia (frogs, salamanders, etc.)
- 17 Reptilia (snakes, lizards, turtles)
- 18 Aves (birds)
- 19 Mammalia (mammals)

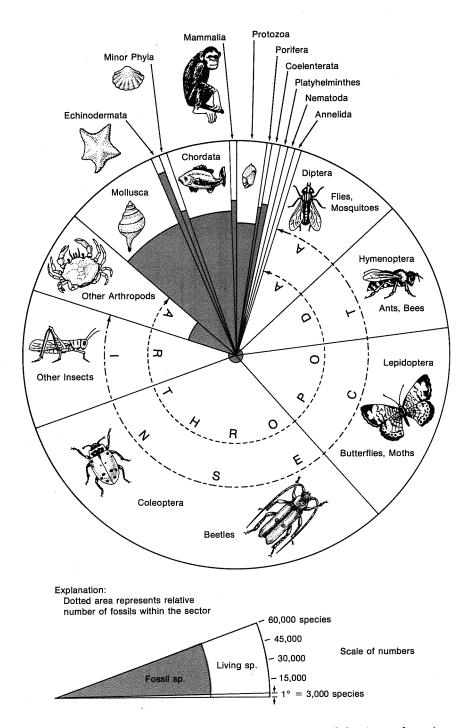


Figure 1. Pie diagram of the relative numbers of living species belonging to the major taxonomic groups of animals. The diagram reveals the great diversity of insects, particularly of the beetles (Coleoptera), flies (Diptera), wasps and related forms (Hymenoptera), and moths and butterflies (Lepidoptera). Although the estimates of absolute numbers were made in 1953, and hence are somewhat out of date, the proportional representation of the major groups remains about the same. (From "The Relative Number of Living and Fossil Species of Animals," S. W. Muller and Alison Campbell, Systematic Zoology, 3(4):168-170.)

Kingdom Animalia

Phylum Arthropoda

Class Insecta

Order Hymenoptera

Family Apidae

Genus Apis

Species mellifera

Subspecies ligustica

Kids Pour Coffee On Fat Girl Scouts

Kings Play Chess On Fridays, Generally Speaking

King Phillip Came Over From Glorious Scotland

King Phillip Came Over From Germany Stoned



Western honey bee (Italian race)

Genus *Apis*Species *mellifera*Subspecies *ligustica*L for Linnaeus

Apis mellifera ligustica L.

Common, or vernacular, name =

Name used in common parlance (in the indigenous language)



German cockroach--Blattella germanica

Helicoverpa zea

aka

Corn earworm

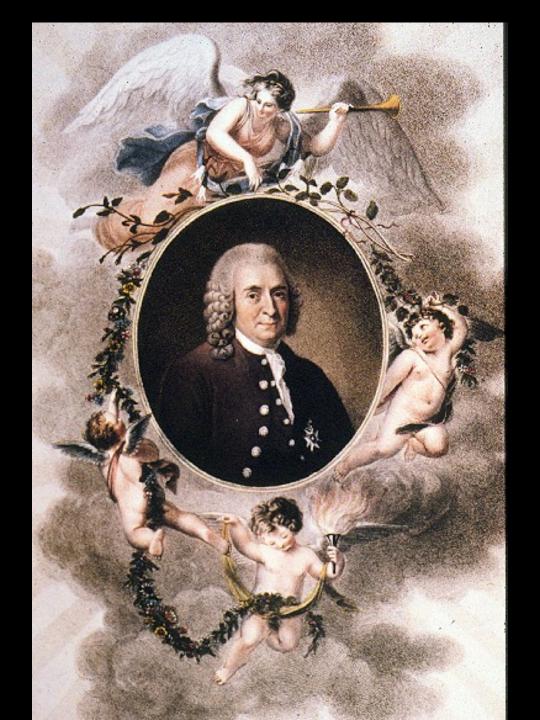
Cotton bollworm

Tomato fruitworm

False tobacco budworm



Carolus Linnaeus author of *Systema Naturae* (1758) and inventor of the binomial system of nomenclature *Systema Naturae* contained about 2000 insect names



Reasons for using scientific (instead of vernacular) names

- they're universally understood
- they convey information about the organism's taxonomic position
- they convey information content about the organism's appearance or habits
- they apply to all life stages



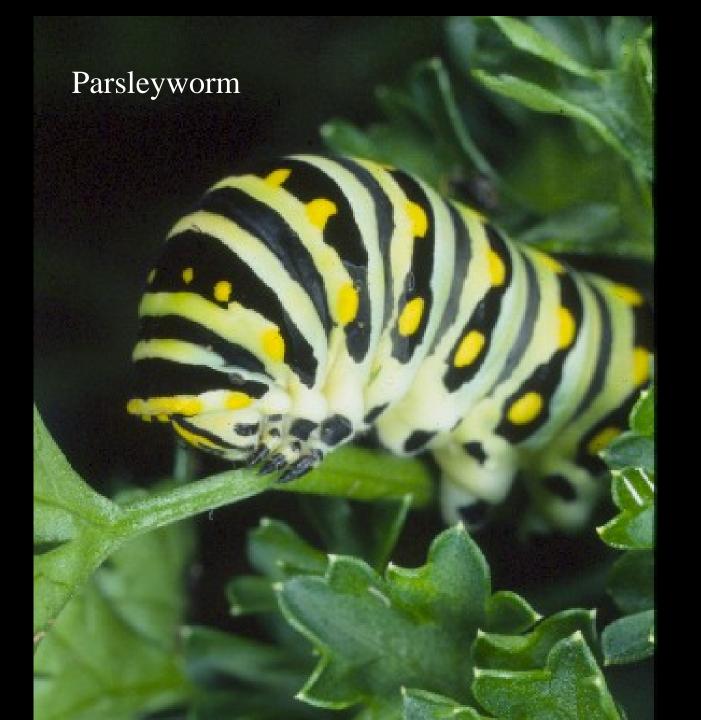
Diabrotica undecimpunctata ("eleven-spots")



Rhopalosiphum maidis ("corn")

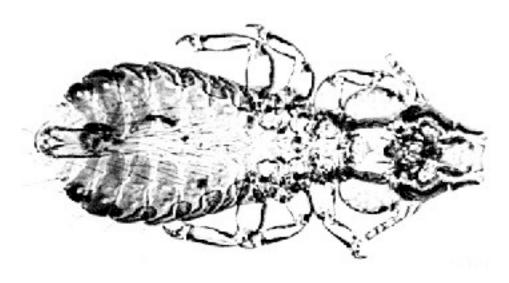


Black swallowtail (Papilio polyxenes)

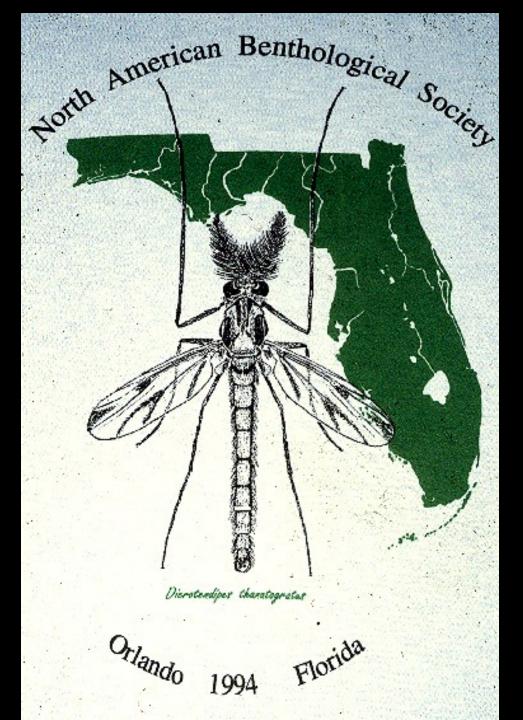




Example of a patronym



Strigiphilus garylarsoni



Dicrotendipes thanatogratus

from "thanatos" = "dead" and "gratus" = "grateful"







Scaptia beyonceae Lessard, 2011

Click here for more info.

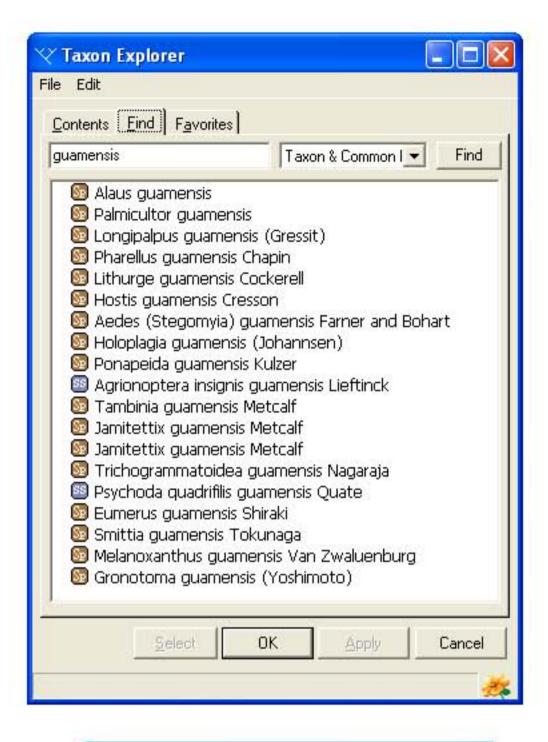


Fossil paleodictyopteran *Scepasma europea* (formerly *Rochlingia hitleri*)

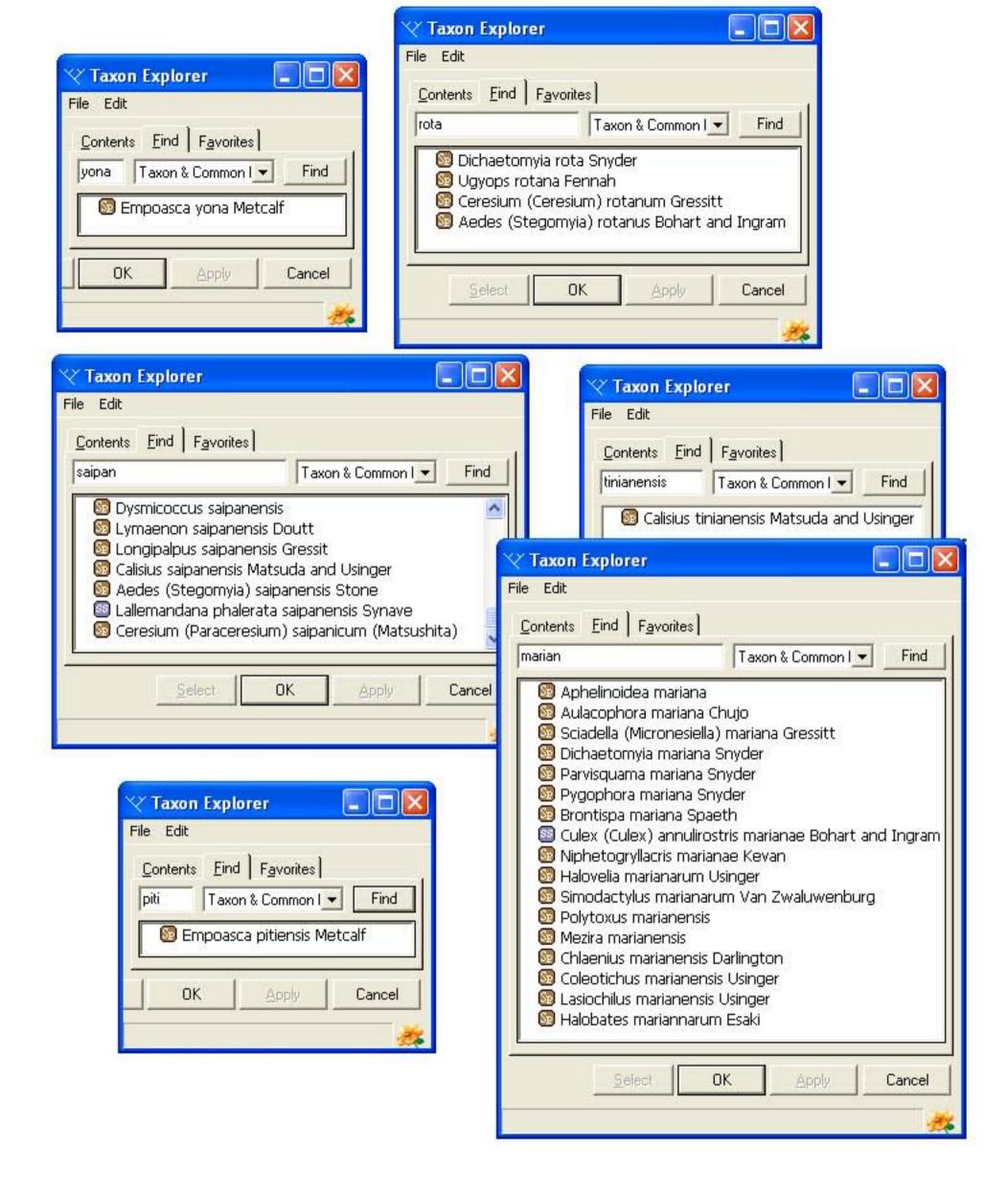
Taxonomic rules to remember

- The only taxonomic names that are italicized are genus and species
- The species epithet is never capitalized
- Names of kingdoms, phyla, classes, orders, families, and genera are always capitalized
- Family names of animals end in "i-d-a-e" (e.g., Chrysomelidae)

Longest name	Parastratiosphecomyia stratiosphecomyioides	(stratiomyid fly)
Shortest name	Ips pini	(pine beetle)
	Peza ops	(water mite)
Strange names	Aaata	(buprestid beetle)
	Zyzzyva	(beetle)
	La cucaracha	(snout moth)
	Aha ha	(sphecid wasp)
	Enema pan	(beetle)
	Verae peculya	(wasp)
	Heerz lukenatcha	(wasp)
	Phthiria relativitae	(bee fly)
	Agra vation	(beetle)







Insnesia

Insnesia is a genus of psyllids described by Tuthill.

The name comes from **Ins**ects of Micronesia, the journal series in which the description was published.

Insnesia glabrascuta (Caldwell) is a very common pest of ifil trees on Guam.