

Sharktooth Hill Fauna

Post Date: **08/13/2003**

Archive Date: **07/04/2012**

Sharktooth Hill Fauna, circa 2003

List of taxa from the Sharktooth Hill Local Fauna The taxa with + are previously unreported in the literature. Those with * are taxa whose holotypes were collected in the Sharktooth Hill bonebed. Taxa with a question mark are considered as undetermined or unknown until further research is completed on that certain taxa or species.

(Note: Fauna List is still being looked into and new species maybe added to the list or some species maybe taken off the list for scientific accuracy.)

Phylum: Chordata (vertebrates)

Class Chondrichthyes

Superorder Selachoidii (Sharks)

Order Hexanchiformes

Family Hexanchidae (six-gilled & seven-gilled sharks)

*Hexanchus andersoni (Jordan, 1907) (six-gilled shark)

Notorhynchus sp. (seven-gilled shark)

Order Heterodontiformes

Family Heterodontidae (bullhead "horn" shark)

Heterodontus sp

Order Squaliformes

Family Squalidae (dogfish sharks)

*Squalus occidentalis (Agassiz, 1843)

Squalus serriculus (Jordan & Hannibal, 1923)

Family Echinorhinidae (bramble shark)

*Echinorhinus blakei (Agassiz, 1856)

Order Squatiniformes

Family Squatinidae (angel shark)

*Squatina lerichei (Jordan & Beal, 1913)

Order Lamniformes

Family Megachasmidae (mega-mouth shark)

+Megachasma sp.

Family Odontaspidae (sand tiger sharks)

+Odontaspis sp.

? Carcharias (Odontaspis) cuspidata (Agassiz, 1843)

Family Cetorhinidae (basking shark)

Cetorhinus cf. maximus (Gunner, 1765) (basking shark)

Family Alopidae (thresher shark)

Alopius ? latidens (Leriche, 1909) (thresher shark)

Family Lamnidae (Mako sharks)

Isurus planus or plana (Agassiz, 1856) (hooked-tooth Mako shark)
 Isurus hastalis (Agassiz, 1843) (giant Mako shark)
 Isurus retroflexus (Agassiz, 1843) (Longfin Mako shark)
 Isurus desori (shortfin Mako shark)
 Isurus sp
 Family Otodontidae (Mega-teeth and Great White Sharks)
 Carcharocles megalodon (Agassiz, 1837) (Mega-tooth)
 +Parotodus benedeni (LeHon, 1871) (false-tooth Mako shark)
 Order Carcharhiniformes
 Family Carcharhinidae (tiger sharks, requiem sharks)
 *Galeocerdo aduncus (Agassiz, 1843) (tiger shark)
 *Galeocerdo contortus (Gibbes, 1849) (tiger shark)
 Rhizoprionodon sp. (sharpnose shark)
 +Negaprion antiquus (lemon shark)
 *Carcharhinus antiquus (Agassiz, 1856) (gray shark)
 Carcharhinus cf. egertoni (Agassiz, 1843) (requiem shark)
 Carcharhinus cf. limbatus (Valenciennes, 1839) (blacktip shark)
 Family Hemigaleidae (weasel "snaggletooth" sharks)
 +Genus/species undetermined
 Hemipristis serra (Agassiz, 1843) (snaggletooth "Indian Ocean" shark)
 Family Triakidae (hound sharks)
 Galeorhinus sp? (tope shark)
 +Mustelus sp. (smooth-hound shark)
 *Triakis beali (Jordon, 1919) (hound shark)
 Family Scyliorhinidae (catsharks)
 Scyliorhinus sp. (catshark)
 +Cephaloscyllium sp. (swellshark)
 Family Sphyrnidae (hammerhead shark)
 Sphyrna cf. zygaena (Linnaeus, 1758)
 Family Pristiophoridae
 Pristiophorus sp (sawfish)
 Superorder Batoidea (Rays and Skates)
 Order Rajiformes
 Family Rajidae (skates)
 +Raja sp.
 Family Rhinobatidae (guitar fish)
 +Rhinobatus sp.
 Order Myliobatiformes
 Family Myliobatidae (eagle bat rays)
 *Myliobatus morriami (Jordon & Beal, 1913)
 *Myliobatus smithii (Jordon & Beal, 1913)
 Family Dasyatidae (sting rays)
 +Dasyatis sp. (Diamond back stingray)
 +Mobula loupianensis (Cappetta, 1970) (devil ray)

- Family Gymnuridae (butterfly ray)
 - +Gymnura sp.
- Family Moblidae (manta ray)
 - +Mobla sp.
- Class Osteichthyes (bony fish)
 - Order Clupeiformes
 - Clupeiform, undef.--herring
 - Order Perciformes
 - Family Sciaenidae (giant sea basses)
 - +cf. Cynoscion sp.
 - Family Carangidae (jacks)
 - Caranx sp.
 - +Two genera/species undetermined
 - Family Labridae (sheeps heads)
 - +cf. Pimelometopon sp.
 - Family Scaridae
 - +cf. Nicholsina sp.
 - Family Serranidae (sea basses)
 - small and large sp.
 - Family Acanthuridae (surgeon fish)
 - Prionurus sp.
 - Family Scombridae (mackerel, tuna)
 - +Two genera/species undetermined
 - Family Istiophoridae
 - Genus/species undetermined
 - Order Pleuronectiformes
 - Family Pleuronectidae (or Bothidae) (flat fish)
 - +Genus/species undetermined
 - Order Tetradontiformes
 - Family Balistidae (trigger fish)
 - +Genus/species undetermined
 - Oplegnathus sp.
 - Family Diodontidae (puffer fish)
 - +Diodon sp.
 - Family Molidae (Ocean sun fishes)
 - Mola sp.
 - Osteichthyes, incertae sedis
 - +Five species undetermined
- Class Reptilia
 - Order Crocodylia
 - Family Gavialidae or Crocodylidae (crocodiles)
 - +? Thecachampsia sp. (marine crocodile)
 - Order Chelonia
 - Family Testudinidae (land tortoises)

- +Geochelone sp. or Gopherus sp.
- Family Cheloniidae (green sea turtles)
 - +Genus/species undetermined
- Family Carrettochelyidae? (hawks bill turtles)
 - +Genus/species undetermined
- Family Dermochelyidae (leatherback turtles)
 - *Psephophorus californiensis (Gilmore, 1937)
- Class Aves (Birds)
 - Order Procellariiformes
 - Family Diomedeidae (albatrosses)
 - *Diomedea californica (Miller, 1962)
 - *Diomedea milleri (Howard, 1966)
 - Diomedea sp. (possibly new species)
 - Family Procellariidae (shearwaters)
 - *Puffinus inceptor (Wetmore, 1930)
 - Puffinus sp.
 - *Puffinus priscus (Miller, 1961)
 - *Puffinus mitchelli (Miller, 1961)
 - *Fulmarus miocaenus (Howard, 1984)
 - Order Pelecaniformes
 - Family Sulidae (boobies, gannets)
 - *Morus vagabundus (Wetmore, 1930)
 - Morus sp.
 - Family Pseudodontornithidae (giant bony toothed birds)
 - Osteodontornis sp., O. ? orri (Howard, 1957)
 - Order Anseriformes
 - Family Anatidae (ducks, geese)
 - Anseriformes sp. (including Branta sp. of Miller, 1961)
 - *Presbychen abavus (Wetmore, 1930) (goose-like anseriform)
 - *Megalodytes morejohni (Howard, 1992) (swan-like anseriform)
 - Megalodytes sp.
 - Order Charadriiformes
 - Family Phoenicopteridae (flamigos)
 - Megapaloelodus sp.
 - Family Recurvirostridae (avocets)
 - Recurvirostra sp.
 - Family Alcidae (auks, puffins)
 - Two Genus/species undetermined
 - Order Ciconiiformes
 - Family Vulturidae (New World vultures, condors)
 - *Hadrogyps aigialerus (Emslies, 1988)
 - Family Ciconiidae (storks)
 - Genus/species undetermined
 - Order Falconiformes

- Family Pandionidae (ospreys)
 - *Pandion homalopteron (Warter, 1976)
- Class Mammalia
 - Suborder Placenta
 - Order Cetacea
 - Suborder Odontoceti (toothed whales)
 - Family Physeteridae (sperm whales)
 - +cf. Scaldicetus sp. (primitive sperm whale)
 - *Aulophyseter morricei (Kellogg, 1927) (advanced sperm whale)
 - Family Squalodontidae (Acrodelphidae)
 - *Prosqualodon errabundus (Kellogg, 1931) (primitive platanistoid)
 - Family Kentriodontidae
 - aff. Kampholophos sp. (primitive (3m) long-snouted delphinoid)
 - *Liolithax kernensis (Kellogg, 1931) (primitive long-snouted delphinoid)
 - *Kentriodon obscurus (Kellogg, 1931) (advanced short-snouted delphinoid)
 - *Grypolithax pavida (Kellogg, 1931) (advanced short-snouted delphinoid)
 - *? Lamprolithax simulans (Kellogg, 1931) (advanced long-snouted delphinoid)
 - ? Lamprolithax annectens (Kellogg, 1931) (advanced long-snouted delphinoid)
 - Genus/species undetermined
 - Family Phocoenidae (porpoises)
 - *Loxolithax sinuosa (Kellogg, 1931)
 - Undetermined Odontoceti (dolphins)
 - *Oedolithax mira (Kellogg, 1931)
 - *Nannolithax gracilis (Kellogg, 1931)
 - *Platylithax robusta (Kellogg, 1931)
 - Suborder Mysticeti (baleen whales)
 - Family Cetotheriidae
 - aff. Herpetocetus sp.
 - *Parietobalaena securis (Kellogg, 1931) (tiny (4m) primitive mysticete)
 - *Tiphycetus temblorensis (Kellogg, 1931) (small (6-7m) mysticete)
 - *Peripolocetus vexillifer (Kellogg, 1931) (small (7m) mysticete)
 - aff. Aglaocetus sp. (large (12m) primitive mysticete)
 - Family Balenopteridae
 - +Large rorqual
 - Family Balaenidae? (right whales)
 - +Genus/species undetermined
 - Order Carnivora
 - Family Otariidae (sea lions, walruses)

Subfamily Allodesminae
*Allodesmus kelloggi (Mitchell, 1966)
*Allodesmus kernensis (Kellogg, 1922)
*Allodesmus graciliis (Barnes, 1995)
Subfamily Desmatophocinae
+ aff. Desmatophoca sp.
Subfamily Imagotariinae
*Pelagiarctus thomasi (Barnes, 1988)
*Neotherium mirum (Kellogg, 1931)
+Neotherium ernesti (recently discovered 1999-2000)
Family Felidae (cats)
? Pseudaelurus sp. (ancestary cat)
Family Canidae (dogs)
+ Tomarctus sp. (ancestary dog)
Family Mustelidae (weasels and allies)?
Genus/species undetermined (recently discovered in 2000, perhaps weasel)
Family Amphicyonids (Bear-dog)?
? Amphicyonids indet (recently discovered 7/02-9/20)
Order Desmostyidia (desmostylians)
Family Desmostyidae
Desmostylus hesperus (Marsh, 1888)
Family Paleoparadoxidae
+Paleoparadoxia sp.
Order Sirenia (sea cows, manatees, and relatives)
Family Dugongidae (sea cows)
Metaxytherium cf. M. arctodites
Order Proboscidea (elephants, mastodonts, and relatives)
Family Gomphotheriidae (primitive, shovel tusked elephants)
+Gomphotherium sp.
Family Mammutidae (mastodonts)
+Zygodolophodon sp (Miomastodon sp.)
Order Perissodactylia
Family Equidae (horses)
Subfamily Equinae
(13 genera found in Kern County, 2 from Sharktooth Hill)
Merychippus isonesus (small browsing horse)
Merychippus brevidontus (Bode, 1934) (small browsing horse)
Hypohippus sp. (large browsing horse)
Subfamily Anchiteriinae
+Parahippus sp. (small browsing horse)
Family Tapiridae
+Miotapirus sp. (medium sized tapirs)
Family Rhinocerotidae (rhinoceroses)

Teleoceras sp. (large rhino)
+ cf. Aphelops sp. (large rhino)
Family Chalicotheriidae? (clawed mammal, related to horses)
? Moropus sp.
Order Artiodactyla
Family Camelidae (Miolabinae) (primitive camels)
+ Genus/species are undetermined, but here are some possible
Genus/species:
? Tylocamulus sp. (tall camel)
? Stenomylus sp. (llamas)
? Aepycamulus sp. (tall camel)
Family Protoceratidae
? Synthetoceras sp. (primitive deer)
Family Paleomerycidae
cf. Barbouromeryx sp. (deer-like artiodactyl, lacking horns)
Family Tayassuidae
? Genus/species undetermined (peccaries or wild pig)

Currently, there are 138 known species of vertebrate animals, not including invertebrate and plant species

LAST UPDATED: 8/15/ 2003: 141 species on the fauna list.

References:

Sharktooth Hill Foundation Faunal list at the former website:

www.sharktoothhill.org

Edward Mitchell's History of Research from Sharktooth Hill, 1965.

Buena Vista Museum of Natural History's Sharktooth Hill fossil Kit 1998.

Buena Vista Museum's tour guide booklet and website

www.sharktoothhill.com

California Geology Magazine: Sharktooth Hill, Kern County, California. 1985.

National Geographic Magazine; November 2001 Evolution of Whales.

Other Sharktooth Hill websites such as

www.elasmo.com

<http://salinevalley.topcities.com/sb/sharkbonebed.html>

http://paleodb.org/nam/listfiles/Sharktooth_Hill.html

Submitted by: John P.C. Stegall.