

Major terrestrial animal taxonomic classifications as defined by God

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The major taxonomic classifications of terrestrial animal kinds, as defined by God, are identified during the Creation Week, the Fall, the Flood, and thereafter. The analysis suggests both similarities and notable differences between the major taxonomic groups as defined by God and those ascribed by Linnaean classifications.

While evolutionists continue to be hard pressed to find transitional forms in their attempts to find common descent between all species, creationists are increasingly demonstrating gaps or discontinuities between the ancestry of animals and plants, which cannot be surmounted by natural selection or mutation. Until recently, creationists lacked a method of biosystematics that substantiated these divisions and clarified the lack of common ancestry between plants and animals, especially between Linnaean orders or families.

In 1990, Walter ReMine presented an alternative method of biosystematics termed “discontinuity systematics” and Kurt Wise utilized ReMine’s terminology, applied it to a creationist model he termed “baraminology”, and further delineated between these groupings.^{1,2} Both concepts are based on biblical precepts that God *created* (*bara* or ברא) animal and plant *kinds* (*min* or מין) during Creation Week, from which all plants and animals derive.³ An objective for creationists is to determine which plants and animals descended from an original created kind.

Membership criteria in a monobaramin, an animal or plant group containing organisms related by common descent, can be determined by successful hybridization, observation and experimentation, and unambiguous lineage such as overlapping populations.^{1,2} Without hybridization data, morphology, zooarchaeology, ecology, genetics, molecular biology, paleontology and geology may also aid in the determination of common ancestry or lack thereof between animal groups.^{2,4,5} In addition, biblical identifications could be used to identify monobaramin.^{2,5}

After 1990, bariminological studies were completed to determine which species derived from created plant and animal kinds.^{6–32} These studies aimed to define which species were related to a created plant or animal kind and to exhibit the limits of plant and animal adaptation. Several studies served to correlate one or several created kinds, as defined in the Bible, with specific plants and animals in nature, the fossil record, or both. In 2001, Chard Berndt attempted to classify all earthly and heavenly life based on scripture.³³ The bold project was roundly criticized by agnostics and more tellingly by creationists.^{34–35} After reviewing Berndt’s manuscript, Don Batten concluded, “I don’t see it being very helpful in furthering a creationist approach to biological classification.”³⁵

What is needed is a clear discussion of the large taxonomic classifications created by God and the plants and animal kinds that belong to each group.

Classification of terrestrial animals

The Genesis account is remarkable because God provides His own taxonomic classifications. Later in the Bible, especially in Leviticus, God further describes which animals belong to His taxonomic groupings. God created all animal life on the fifth and sixth day of the Creation Week. On the fifth day (Genesis 1:20–23), God created three groups of animals: Swarmer or creepers of the sea, dragons or monsters of the sea, and birds of the air. The Hebrew word for each and its *Strong’s Concordance* number³⁶ are shown below.

And God created ...

1. The great sea monsters (התנינם הגדלים) תנינם – 8577 (*taninim*)
2. That creeps which swarmed the waters (אשר שרצו המים הרמשת) רמז – 7430 (*remes*) שרץ – 8313 (*sheretz*)
3. Every bird [with] wing (עוף כנף – כל) עוף – 5775 (*‘of*)

On the sixth day (Genesis 1:24–25), God created three groups of animals: *Behemah*, creepers, and beasts of the earth. Then God created man, male and female, and commanded them to rule over these aforementioned taxa and fish or דג (Genesis 1:26–31).

And God made ...

1. The beasts of the earth (הארץ – חיה) ארץ – 776 (*aretz*) חיה – 2416 (*chayyat*)
2. The *behemah* (הבהמה) בהמה – 929 (*behemah*)
3. Every thing that creepeth (רמש האדמה – כל) רמש – 7430 (*remes*)
4. Man (אדם) אדם – 120 (*adam*)
5. The fish of the sea (תהים בדג) דג – 1710 (*dag*)

In the Garden of Eden (Genesis 2:19–20), God asks Adam to name animal kinds from three taxonomic groups: *Behemah*, birds, and beasts of the field.

And the man called names ... (Genesis 2:20)

- 1 To all the *behemah* (לכלהבהמה-) בהמה – 929 (*behemah*)

Table 3. Animal kinds attributed by God to *remes* or *sheretz* (creeper or swarmer).

Book	Ch.	Verse	Biblical Context	Hebrew	English Pronunciation [Strong #]	English Translation (Amount)
				שרץ/רמש	Remes [7430] / Sheretz [8313]	Creeper / Swarmer
Lev	11	10	But any one that does not have fins and scales in the seas, and in the brooks, of any swarming creature of the waters, and of any creature which lives, which is in the waters; they are an abomination to you.	שדן המים	<i>micol sheretz ha'maim</i>	... of any swarmer of the waters
Lev	11	20	Every swarming creature which flies going on all four it is an abomination to you.	העוף ההעל – ארבע כל שרץ	<i>col sheretz ha'ohf ha'helech al-arbah sheqetz hu la'chem</i>	Every swarming creature which flies going on all four it is an abomination to you
Lev	11	21,22	Only this may you eat of any swarming thing which flies, which goes on all four, which has lower legs above its feet to leap with on the earth; (v.22) these are from them you may eat ...	מכל שרץ העוף	<i>micol sheretz ha'ohf</i>	... of any swarmer which flies ...
Lev	11	22		הארבה	<i>ha'arbeh</i> [697]	Locusts (11), locust (9), grasshoppers (3), grasshopper (1), bald locust (1)
Lev	11	22		הסלעם	<i>ha'salam</i> [5556]	Bald locust (1), katydid (1)
Lev	11	22		ההרגל	<i>ha'hargol</i> [2728]	Long horned grasshopper (1), cricket (1), locust (1), grasshopper (1), beetle (1)
Lev	11	22		החגב	<i>ha'chagav</i> [2284]	Grasshopper (1), locust (1), short horned grasshopper (1)
Lev	11	23	But every swarming thing which flies, which as four feet, it is unclean to you.	וכל שרץ העוף	<i>vecol sheretz ha'ohf</i>	But every swarming thing which flies ...
Lev	11	29	And these shall be unclean to you among the swarming things which swarm on the earth:	השרץ על – הארץ בשרץ	<i>basheretz hasheretz al-ha'aretz</i>	swarming things which swarm on the earth
Lev	11	29		החלד	<i>ha'heled</i> [2467]	Weasel (1), mole (1), rat (1)
Lev	11	29		העכבר	<i>ha'akbar</i> [5909]	Mice (4), mouse (2), jerboa (1), jumping rat (1)
Lev	11	29		הצב	<i>ha'tzav</i> [6632]	Lizard (1), tortoise (1), great lizard (1)
Lev	11	29		האנקה	<i>ha'anakah</i> [604]	Ferret (1), gecko (1)
Lev	11	29		הכה	<i>ha'kuach</i> [3581]	Chameleon (1), monitor lizard (1), any kind of lizard (1)
Lev	11	29		החמט	<i>ha'leta'ah</i> [3911]	Lizard (1), wall lizard (1), gecko (1)
Lev	11	29		טמחה	<i>ha'chumet</i> [2546]	Snail (1), skink (1), sand lizard (1)
Lev	11	29		התנשמת	<i>ha'tinshamet</i> [8580]	Mole (1), chameleon (1), swan (2), white owl (1)
Lev	11	41	And every swarming thing which swarms on the earth is unclean;	השרץ על – הארץ וכל – השרץ	<i>ve'cal hasheretz hasheretz al-ha'aretz</i>	And every swarming thing which swarms on the earth ...
Lev	11	42	... anything going on its belly, and any going on all four, and all having many feet, even every swarming thing that swarms on the earth, you shall not eat them for they are unclean;	... כל – מרבה רגלים כל הולך על – גהון	<i>col holech al-gahen ... col mar'beh rag'laim</i>	... anything going on its belly ... all having many feet
Lev	11	44	You shall not defile your persons with any swarming thing which	הרמש על – הארץ בכל – השרץ	<i>becal hasheretz haromes al-haaretz</i>	... with any swarming thing which creeps on the earth.
Dt	4	18	You shall not make for yourselves a graven image of ...	כל – רמש באדמה	<i>cal-romes be'adamah</i>	... any creeper on the ground
Ps	104	25	This is the sea, great and wide on both hands; there are creeping things even without number ...	שם – רמש ואין מספר	<i>sham-romes va'ayn mispar</i>	There are creeping things even without number ...

2. And to the bird of the heavens (ולעוף השמים) עוף – 5775 ('*of*)

3. And to every beast of the field (ולכל חית השדה) חית – 2416 (*hayyat*) – 7704 (*ha'sadeh*)

Table 1³⁷ exhibits the major taxonomic groups during creation, in the Garden of Eden, at the Fall, and before and after the Flood. These major animal groups are shown in Hebrew, English, and with their *Strong's Concordance* numbers.^{36,38} Furthermore, this table notes whether or not

the major taxonomic groups are mentioned and their order in each account.

In Genesis, swarmers (*sheretz* / שרץ) and creepers (*remes* / רמש) are used interchangeably to describe large group of animals in both the sea and on land. In the sea, the only animal group that God identifies as being separate from the swarmers/creepers is the sea monsters (*taninim* / תנינים). Fish (*dag* / דג) are mentioned later in Genesis 1:21. For the terrestrial animals, God is more descriptive with regard to each taxonomic grouping.

Table 4. Animal kinds attributed to *behemah*, which includes medium to large mammals.

Book	Chapter	Verse	Biblical Context	Hebrew	English Pronunciation [Strong #]	English Translation (Amount)
				בהמה	Behemah [929]	"Cattle"
Lev	11	4	The gamal, though it brings up the cud, yet it does not divide the hoof; it is unclean to you;	הגמל	<i>ha'gamal</i> [1581]	Camels (45), camel (5), camels' (3), camel's (1)
Lev	11	5	and the shafan, though it brings up the cud, yet it does not divide the hoof; it is unclean to you;	השפן	<i>ha'shafa</i> n [8227]	Shaphan (30), conies (2), coney (1), cony (1), rock badger (1)
Lev	11	6	and the arnevet, though it brings up the cud, yet it does not divide the hoof; it is unclean to you.	הארנבת	<i>ha'arnevet</i> [768]	Hare (2), rabbit (1)
Lev	11	7	and the chazir, though it divides the hoof and is cloven-footed, yet it does not bring up the cud; it is unclean to you.	החזיר	<i>ha'chazir</i> [2386]	Swine's (4), swine (2), boar (1), pig (1)
Dt	14	4	These are the ___ which you shall eat:			
Dt	14	4		שור	<i>shur</i> [7794]	Ox (54), bullock (11), oxen (8), cow (2), bullocks (1), bull (1)
Dt	14	4		כשבים	<i>kesavim</i> [3775]	Sheep (8), lamb (3), lambs (1), ram-lamb (1), young sheep (1)
Dt	14	4		עזים	<i>ezim</i> [5795]	Goats (40), goats' (10), kid (7), goat (5), she goats (3), kids (3), he goat (2), she goat (2), goat (1), he goats (1)
Dt	14	5		איל	<i>ayal</i> [354]	Hart (9), harts (2), deer (1), young stag (1)
Dt	14	5		צבי	<i>tzevi</i> [6643]	Roe (8), roebuck (4), (gazelle) (3), roes (3), roebucks (1)
Dt	14	5		יהמור	<i>yach'mur</i> [3180]	Fallow deer (2), roebuck (1), roe deer (1)
Dt	14	5		אקי	<i>akko</i> [689]	Wild goat (1)
Dt	14	5		דישון	<i>dishon</i> [1788]	Ibex (3), antelope (1), pygarg (1)
Dt	14	5		תאי	<i>t'oh</i> [8377]	Oryx (1), antelope (1), wild bull (1), wild ox (1)
Dt	14	5		זמר	<i>zamer</i> [2169]	Mouflon (1), chamois (1), mountain sheep (1), gazelle (1)
Prov	30	30	A layish is mighty among _____,	ליש	<i>layish</i> [3918]	Old lion (2), lion (1)
Ec	3	18	... the sons of men, that God might manifest them, and that they might see that they themselves are _____.	אדם	<i>adam</i> [120]	Man (390), men (109), Adam (20), man's (16), persons (8), husbandman (1), hypocrite (1), men of low degree (1).
Zec	14	15	And so shall the plague of the sus, the pfered, the gamal, and the chamor, and all the _____ which shall be in those camps, like this plague.			
Zec	14	15		הסוס	<i>ha'sus</i> [5483]	Horses (97), horse (35), horseback (2), on horseback (2), crane (2), horsehoofs (1), horses' (1)
Zec	14	15		הפרד	<i>ha'pfered</i> [6505]	Mules (8), mule (6), mules' (1)
Zec	14	15		הגמל	<i>ha'gamal</i> [1581]	Camels (45), camel (5), camels' (3), camel's (1)
Zec	14	15		החמור	<i>ha'chamor</i> [2543]	Donkey (55), donkeys (39), donkey's (1), male donkey (1)
1Sam	17	44	Goliath: "Come to me, and I will give thy flesh to the fowls of the air, and to the _____ of the field."			
Jer	15	3	_____ of earth to devour and the dogs to tear,	כלבים	<i>ha'kelevim</i> [3611]	Dogs (16), dog (14), dog's (2)

For this analysis, I first identified all Old Testament verses mentioning the major taxonomic classifications. Second, I isolated those verses where a specific animal kind was attributed to a major taxon and noted its English pronunciation. Third, I listed the translations for this animal kind. These analyses are exhibited in tables 2 through 5,³⁷ and are individually assessed below.

Bird ('ôf)

The first group of terrestrial animals that God created was “every bird with wing” (Genesis 1:23). This taxon is particularly rich in descriptive detail because God delineates which birds were clean and unclean in Leviticus and Deuteronomy (see table 2)³⁷.

This taxon comprises both birds which fly and *most likely* those that do not. Several bird kinds, namely *ya'anah* and *chasidah* have been translated as ostrich. The translation of *ya'anah* as ostrich continues today in Modern Hebrew. The description of both flying and flightless birds as 'ôf corresponds to the Linnaean class Aves.

Going against Linnaean classifications, the bat or *atalef* is denoted as being part of 'ôf. The translation of *atalef* as a bat is uniform throughout the Bible. Nowhere in the Bible is *atalef* translated as representing an avian species. Even in Modern Hebrew, the word *atalef* continues to be translated as bat. Hence, 'ôf includes flying and flightless birds and bats, the latter being the Linnaean order Chiroptera ascribed to Mammalia.

Creepers / swarmer (*remes / sheretz*)

Another major group of terrestrial animals which God created are the creepers and swarmers. The Genesis accounts mostly use the word *remes* to describe these creeping animals. However, in Genesis 7:21, *sheretz* is used to describe this group.

God first uses these words to describe marine animals which He created on the fifth day (Genesis 1:21–22). These verses show the interchangeability of *remes* and *sheretz* and how the root word transitions from nouns to verbs to describe this taxon of creepers / swarmers. In Genesis 1:21, the taxon which is described as הרמשת אשר שרצו המים or “that is creeping which swarmed the waters”. *Romeset* is an active participle and *shertzu* is a plural, third-person, perfect verb. This phrase in Genesis 1:21 reflects the creative directive by God in Genesis 1:20: “God said let swarm the waters swarmers” שרץ ישרצו המים. In Genesis 1:21, the taxon which is described as הרמשת אשר שרצו המים or “that is creeping which swarmed the waters”. *Romeset* is an active participle and *shertzu* is a plural, third-person, perfect verb. This phrase in Genesis 1:21 reflects the creative directive by God in Genesis 1:20: “God said let swarm the waters swarmers” שרץ ישרצו המים. Here, *sheretz* is an imperfect verb and a noun. To reiterate in less wooden English, God declares “let the waters swarm with swarmers” in 1:20, and in 1:21 God creates each “living soul that is creeping which swarmed the waters”. Both the mechanics of 1:21 and the context of 1:20–21 exhibit how שרץ (swarmer) and רמש (creeper) are used interchangeably and their descriptions *creep* literally from nouns to different verb tenses.

In Leviticus 11:20–23 the word 'ôf is also used with *sheretz*. However, 'ôf can be translated as bird, flying, or fieth. Here, שרץ העוף is literally *swarmer the flying* or *swarming thing which flies*. Hence, the swarmer is being described as flying. *Ha'ohf* or העוף describes the swarmer and is not the object of description. If the verse read עוף השרץ then the text could be translated as “bird which is swarming” or “swarming bird”, which would indicate that insects are part of 'ôf. However, the passage clearly indicates that שרץ is in the construct state and is described by העוף and hence is correctly translated in every Hebrew translation of the text as “swarming thing which flies” or “flying swarmer”. Here, Chard Berndt made and then attempted to defend this serious error, after the critique by Batten.^{33,35,40–41}

That these *sheretz*, in Leviticus 11:20–23, are land animals is straight forward. God discusses *behemah* on the earth starting at Leviticus 11:2, sea creatures at 11:9, birds at 11:13, and terrestrial creepers/swarmers at 11:20. Furthermore, that these winged swarmers have legs and feet, which they use to leap on the earth (Lev 11:20–21), provides a clear indication that this taxonomic group represents terrestrial animals.

This group of terrestrial animals is the most diverse of the major classifications and contradicts much of Linnaean systematics. Biblical passages in Leviticus and Deuteronomy suggests that terrestrial *remes / sheretz* comprise all insects and arachnids. Leviticus 11:21–22 mention *remes* which fly, and lists four “clean” creepers, which are translated as species of locusts, crickets, or both. Leviticus 11:42 notes that this group comprises animals which crawl on their belly and have many feet. However, Leviticus 11:29 broadens this taxon to include small mammals such as the *heled* and *akbar*, translated as the weasel and mouse. Also *chumet*, which is commonly translated as snail, belongs to *remes*. Furthermore, God assigns *tzav*, *ahakah* and *leta'ah*, which are translated as lizard or turtle species, to this group. And similar to the variance used to express the swarmer / creeper taxon in the seas, God alternates using *sheretz* (Leviticus 11:21,23,29,41–46) or *remes* (Genesis 8:17,19; Leviticus 11:44; 20:25), with nouns and verbs of these root words to describe this taxon on land.

Hence, *remes/sheretz* is the broadest taxonomic group created by God. This terrestrial taxon comprises insects, arachnids, snails, small reptiles and small mammals (see Table 3).

Behemah

The word *behemah* is commonly translated as “cattle”. Comparing biblical passages, the *behemah* group includes a wide array of terrestrial animals (table 4). Verses in Leviticus and Deuteronomy indicate that *behemah* includes the camel, rock badger, hare, swine, sheep, goat, oxen, deer and ibex. Zechariah 14:15 notes that horses, mules, camels and donkeys belong to this classification.

Deuteronomy 28:26 and 1 Samuel 17:44 note that *behemah* comprise non-avian carnivorous animals that consume the remains of humans. Proverbs 30:30 notes that the lion is from the *behemah*. Furthermore, in Ecclesiastes

3:18, humans are attributed to the *behemah*. Lastly, Jeremiah 15:3 associates dogs with *behemah*.

To sum up, the Bible suggests that the translation of *behemah* corresponds to the Linnaean classification of mammal (see table 4). However, that *remes* comprises small mammals suggests that *behemah* includes mammals with sizes equal to or larger than the hare or rock badger.

Beast of the earth (*chayat ha'aretz*)

Of all the created animal groups, the beasts of the earth are the most enigmatic with regard to scripture. Although mentioned during Creation Week, very few references after creation are associated with this taxonomic classification. These mostly comprise prophetic passages without associations with specific animals. Thallon adroitly suggests that beasts of the earth are a large taxonomic grouping which comprised the beasts of the field, a smaller array of created kinds.⁴² Hence, specific animals associated with beasts of the field also belong to the more inclusive category of beasts of the earth (see table 5).

I want to include one other possible association. In Job 40:15–24 God describes the Behemoth. The description resembles that of a large herbivorous sauropod, such as an *Apatosaurus*, in that its tail is described as hanging “like a cedar” (Job 40:17) and its immensity blocks the flow of rivers (Job 40:22). Furthermore, the Behemoth is associated with the beasts of the field (Job 40:20) and is described as “the first in the ways of God” (Job 40:19).

In Genesis 1:25–26, God first makes the beasts of the earth before the *behemah*, creeping animals or man. That Job 40:19 describes Behemoth as first in the ways of God and Genesis 1:25 notes that God first created the beasts of the earth on the sixth day of creation, may suggest the Behemoth belonged to the beasts of the earth.

After the Flood, beasts of the earth are mentioned as fearing man (Genesis 9:2, 9–10). However, in these passages the Hebrew prefix *col* or “all” might indicate the demarcation

of an inclusive supergroup comprising all terrestrial animal life.

Beast of the field (*chayat ha'sedeh*)

The last major taxonomic classification created by God are the beasts of the field (table 5). Biblical passages note that these animals prefer desolate land, carnivory, and are associated with Hell (2 Samuel 21:10; Ezekial 31:13, 39:17; Jeremiah 12:9).

They are listed in many prophetic verses but are usually not associated with specific animal kinds, with two noted exceptions. Genesis 3:1 describes the serpent or *nachash*, as being the wisest from all the beasts of the field. After the Fall, God curses the serpent stating that it would in the future move on its belly and lick dust all the days of its life. Hence, before the curse, the serpent must have stood upright and was not near the ground. Isaiah 43:20 associates beasts of the field with *taninim*. This is the same word that in Genesis 1:22 denotes sea monsters. In Isaiah these *taninim* are terrestrial and are translated as dragons, serpents or monsters.

That God describes small reptiles such as lizards and turtles as being part of *remes* or creepers strongly indicates that the beasts of the field comprised larger reptiles. To sum up, the beasts of the field are translated as dragons, legged serpents and monsters, and represented large carnivorous reptiles that moved above the ground. These descriptions of beasts of the field suggest a correlation with sauropods, especially theropods, which were mostly carnivorous.

Summary

Table 6 exhibits a comparison between the major terrestrial faunal groupings created by God and Linnaean classifications. When God created ‘*of*, these comprised all birds and bats. Beasts of the earth and field included large reptile species that today are mostly extinct. *Behemah* comprised mammals with sizes equal to or larger than hares. Lastly, God created *remes*, a group which included

Table 6. Comparison between major terrestrial faunal groupings created by God and proposed Linnaean classifications.

Major Taxon Defined By God	Common Translation	Proposed Linnaean Classifications
<i>Behemah</i>	Cattle	Class: Mammalia; larger than or equal to the size of hares and rock badgers.
<i>Remes / Sheretz</i>	<i>Creepers / Swarmer</i>	Class: Mammalia; smaller in size than hares / rock badgers.
		Phylum: Arthropoda (insects, spiders, lice)
		Class: Gastropoda (land snails and slugs)
		Reptilia, Order: Class: Squamata, Suborders Lacertilia (lizards)
‘ <i>of</i>	<i>Bird</i>	Class: Aves
		Mammalian Order: Class: Chiroptera (bats)
<i>Chayat Ha'Aretz</i>	Beast of the Earth	Supraorder: Dinosauria, Order: Class: Ornithischia
		Supraorder: Dinosauria, Order: Saurischia, Suborder: Sauropodomorpha
<i>Chayat Ha'Sadeh</i>	Beast of the Field	Supraorder: Dinosauria, Order: Saurischia, Suborder: Theropoda
		Reptilia Order: Class: Crocodylia (crocodiles and alligators)
		Reptilia Order: Class: Squamata, Suborders Serpentes & Amphisbaenia (snakes and worm lizards)

small mammals and reptiles, terrestrial snails and slugs, and the entirety of the Linnaean phylum *Arthropoda*: insects, arachnids, millipedes, and similar fauna.

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