Pronunciation of Biological Latin http://www.saltspring.com/capewest/pron.htm

Latin biological names in English speech are usually pronounced with English letter sounds. For example, *virus* is pronounced "vye-rus" in English, but would have been pronounced "weeros" in the Latin of ancient Rome. An Anglo-Latin pronunciation has been in use for centuries, and incorporates features of late Roman dialects that differ from classical Latin.

A **current book** showing pronunciation, meaning, and derivation of many scientific names of North American wildlife, plus a discussion of the history of pronunciation, is *Lexicon of British Columbia Mammals*. Click on <u>Chapters-Indigo</u>.

RULES FOR THE ENGLISH PRONUNCIATION OF BIOLOGICAL LATIN: (Also see References)

Several authors have identified rules that describe the traditional English pronunciation. Usage varies among individuals and continues to evolve, but the descriptive rules serve as a convenient pronunciation benchmark.

Letter Sounds:

Letter sounds are as in English words (and therefore vary with dialect). The digraphs **AE** and **OE** are treated as the letter **E**.

LONG E as in me, we, be: anaemia, caecum, aether, chamaeleon, larvae, vertebrae, foetus, amoeba, phoenix.

SHORT **E** as in met, wet, set: **ae**sthetic, **ae**stivate, **ae**stuary h**ae**morrhage, **oe**sophagus, **oe**strogen.

Note the **AE** ending in group names: dog family, Canidae, ("CAN-id-ee" not "caniday"), rose family, Rosaceae ("ro-SAY-see-ee"), cat subfamily, felinae ("fe-LINE-ee"), apple tribe, maleae ("MAL-ee.ee"), etc.

[AE and OE are often now written simply as E: anemia, fetus, ameba, estrogen.]

C or **G** preceding **AE** or **OE** is pronounced as though followed by **E**:

Caesar = "seesar" caecum = "seekum" coelom = "seelom" algae = "aljee"

CH is pronounced as **K**: **ch**orus, e**ch**o, **ch**rysanthemum.

TH as in **th**orax, **th**ymus, **th**uja ("THOO-ja")

A final vowel is always voiced, as in flora, hero, Apollo.

fungi = "FUNJ-eye," i as in alibi
cocci = "COCKS-eye," i as in alibi
ovale = "oh-VAY-lee," e as in Daphne, hyperbole, anemone, Aphrodite,
Chloe

```
difficile = "dif-ISS-il-ee," (as in the bacterial species name Clostridium difficile, C. difficile -"see dif-ISS-il-ee"), e as in Daphne, hyperbole, anemone, Aphrodite, Chloe stapes = "STAY-peez" e as in Achilles, meninges, diabetes
```

Some initial consonants are silent when followed by a consonant.

```
pterosaur = "TER-o-saur"
pseudopod = "SOO-do-pod"
pneuma = "NEW-ma"
gnathous = "NATH-ous"
phthegma = "THEG-ma"
chthamalus = "THAM-al-us"
ctenoid = "TEN-oid"
mnium = "NY-um"
tmema = "MEE-ma"
```

Stress and Vowel length

English pronunciation conserves the classical Roman accent position, but vowel length rules are unique, and are much more regular than those of classical Latin.

NOTE: Traditional syllable division points may be modified on this page to better phoneticize the words.

1. Words of two syllables are stressed on the first syllable:

```
Femur ="FE-mur"
Sinus = "SI-nus"
Rosa = "RO-sa"
(a) The vowel of the first syllable is short if followed by two or more
consonants:
Comma (o as in cot) [Compare to coma, with one m, below]
Fossa (o as in cot)
Hosta (o as in cot)
Rattus (a as in cat)
Vespa (e as in met)
Septum (e as in met)
Cistus (i as in mit)
(b) The vowel of the first syllable is long if followed by a single consonant:
Coma (o as in go) [Compare to comma, with double-m, above]
Ovis (o as in qo)
Rosa (o as in go)
Crocus (o as in go)
Ramus (a as in gate)
Fagus (a as in gate)
Canis (a as in gate)
Badis (a as in gate)
Salix (a as in gate)
```

Felis (e as in me)
Femur (e as in me)
Sedum (e as in me)
Brevis (e as in me)
Lepus (e as in me)
Iris (i as in hi)
Pinus (i as in hi)
Plica (i as in hi)

2. Words of more than 2 syllables:

(a) are stressed on the **second to last** syllable **IF**:

the vowel of that syllable is followed by two or more consonants (making the vowel short).

Maxilla = "mac-ZILL-a"

Patella = "pa-TELL-a"

Chlorella = "Klo-RELL-a"

Lamella = "la-MELL-a"

Medulla = "med-ULL-a"

Laterallus = "lat-er-AL-us" (compare to lateralis, single I, below.)

Tyrannus = tir-ANN-us" (compare to montanus, single **n**, below.)

Narcissus = "nar-SIS-sus"

Canadensis = "ca-na-DEN-sis"

Macrophyllum = "mac-ro-FILL-um"

(b) are stressed on the **second to last** syllable **IF**:

the vowel is **long** (or transliterates to a Latin long vowel, for example,

Greek eta and omega), including some digraphs.

(Applies to many Latin inflectional suffixes: americanus, lateralis, alpinus, rosinae.)

Ornatus = "or-NAY-tus"

Pectoralis = "pec-to-RAY-lis"

Lateralis = "lat-er-AY-lis" (Compare to laterallus, double-l, above.)

Montanus = "mon-TAY-nus" (Compare to tyrannus, double-n, above.)

Maculata = "mac-you-LAY-ta"

Brachialis = "bray-kee-AY-lis"

Umbellata = "um-bell-LAY-ta"

Foramen = "fo-RAY-men"

Lupinus = "lu-PIE-nus"

Alpinus = "al-PIE-nus"

Bovinae = "bov-EYE-nee"

Homininae = "hom-in-EYE-nee"

Hominini = "hom-in-EYE-nye"

Hominina = "hom-in-EYE-na"

Equisetum = "ek-wi-SEE-tum"

Ctenopoma = "ten-op-OH-ma"

Oenothera = "en-o-THEE-ra"

Ureter = "you-REE-ter"

Masseter = "ma-SEE-ter"

Australopithecus = "Aus-tral-oh-pith-EE-cus"

Duodenum = "du-oh-DEE-num"

Chimaera = "ky-MEE-ra" [ae digraph]

Amoeba = "am-EE-ba" [oe digraph]

Haliaetus = "hal-ee-EET-us" [ae digraph]

(c) are stressed on the third to last syllable if 2a and 2b do not apply.

Rhinocerus = "rhi-NAW-ser-us"

Esophagus = "es-OFF-ag-us"

Geophagus = "iee-OFF-ag-us"

Euphagus = "YOOF-ag-us"

Eupoda = "YOOP-od-a"

Bicolor = "BICK-ol-or"

Archilochus = "ark-ILL-ok-us"

Pardalis = "PAR-dal-is"

Helostoma = "hel-OST-oh-ma"

Stomata = "STOM-at-ah"

Echinodermata = "e-ki-no-DER-mah-ta"

Parenchyma = "pa-REN-kim-ma"

Streptomyces = "strep-TOM-is-eez"

Scleropages = "skler-OP-aj-ees"

Troglodytes = "tro-GLOD-it-ees"

Haematopus = "he-MAT-op-us"

Alcyon = "AL-see-on"

Clematis = "CLEM-ma-tis"

Saccharomyces = "sac-ka-ROM-is-eez"

Difficile = "dif-ISS-il-ee"

Oxalis = "OX-al-is"

Monticola = "mon-TIC-ol-a"

Pterophyta = "ter-OFF-fit-a"

Pterodroma = "ter-ODD-dro-ma"

Bryophyta = "bry-OFF-fit-ta"

Gastropoda = "gas-TROP-od-a"

Copepoda = "co-PEP-od-a"

Disporum = "DIS-po-rum"

Chiroptera = "ky-ROP-ter-a"

Epiphysis = "e-PIF-is-is"

Cerebrum = "SER-eb-rum"

Spermophilus = "sper-MOF-il-us"

Sylvilagus = "sil-VIL-ag-us"

Spilogale = "spi-LOG-al-ee"

Hemionus = "hem-EYE-on-us"

Neotoma = "ne-OTT-om-a"

Cyclamen = "SICK-la-men"

The **stressed vowel** is short except: if **U** as in humerus, numeral, jugular; if preceding a vowel (hemionus, Gaviidae); or if as in media, splenius, radius, planaria, phobia, mammalia, cepacia, rosaceae etc. (Stressed vowel - **A**, **E** or **O** - followed by a single consonant, then two or more vowels, of which the first is **E**, **I** or **Y**.) And note the "SH" sound that may be given to **c** and **t** followed by **i**: dementia, motion, Botia = "bosha", acacia = "akaysha", species = "speeshees".

Notes:

Some **double consonants** (and "mute" consonants followed by **I** or **r**) are treated as single consonants (e.g., TH, PH, CH, BR, DR, TR, PL, QU):

Sacrum - "SAY-crum" = Rule 1b rather than 1a.

Zebra = "ZEE-bra" = Rule 1b rather than 1a.

Glabrum = "GLAY-brum" = Rule 1b rather than 1a.

Mitral = "MY-tral" = Rule 1b rather than 1a.

Nigra = "NY-gra" = Rule 1b rather than 1a.

Verte**br**a = "VER-te-bra" = Rule 2c rather than 2a.

Palpe**br**a = "PAL-pe-bra" = Rule 2c rather than 2a.

Agnatha = "AG-na-tha" = Rule 2c rather than 2a.

Perognathus = "pe-ROG-na-thus" = Rule 2c rather than 2a.

Zalo**ph**us = "ZAL-lo-fus" = Rule 2c rather than 2a.

Enhy**dr**a = "EN-hid-dra" = Rule 2c rather than 2a.

Callitriche = "ca-LIT-rik-ee" = Rule 2c rather than 2a.

Veratrum = "ve-RAY-trum" = Rule 2b rather than 2c.

The letter **X** is treated as two separate consonants because it has a "KS" sound:

Axis, Taxus (short "a" as in cat) following Rule 1a rather than 1b.

Chionodoxus (short "O" as in cot) following 2a rather than 2b

Commemorative names (eponyms):

Taxa may commemorate personal names or surnames such as Alice Eastwood's Daisy, Virginia's Warbler, and Wilson's Honeycreeper. These names are treated as latinized possessive nouns (Alice's = aliciae, Wilson's = wilsoni). The classical accent may be determined by the Latin form of the name. If Wilson were latinized as Wilsonius the pronunciation of wilsoni would be "wil-SO-nye." If Wilson were latinized as Wilsonus, the pronunciation of wilsoni would be "WIL-so-nye." Archival records indicate inconsistency in latinization of names, so some flexibility exists in pronunciation, and there is precedent in both classical and modern Latin for conservation. Thus "WIL-so-nye" (Rule 2c) is preferable to "wil-SO-ni," whereas andersoni is best treated as "an-der-SO-ni" rather than "an-DER-so-ni."

aberti = "a-BER-tye" = Rule 2a aliceae = "al-IS-ee-ee" = Rule 2c calderi = "CALL-de-rye" = Rule 2c

```
hendersonii = "hen-der-SO-nee-eye" = Rule 2c
lewisii = "lew-ISS-ee-eye" = Rule 2c
virginiae = "vir-JIN-ee-ee" = Rule 2c
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Certain **contractions** ending in **-ic**, **-id**, and **-it** retain the vowel quality of the original:

Gravid, (**a** as in c**a**t) from gravidus [rather than Rule 1b] Tropic, (**o** as in c**o**t) from tropicus [rather than Rule 1b] Cephalic, (**a** as in c**a**t) from cephalicus [rather than Rule 2c] Hepatic, (**a** as in c**a**t) from hepaticus [rather than Rule 2c]

Accentation of English contractions varies with suffix:

-POD, stressed third to last syllable:

```
Arthropod = ARTH-ro-pod gastropod = GAS-tro-pod
```

-IC, stressed second to last syllable:

```
pacific = pac-IF-ic
cephalic = ce-PHAL-ic
somatic = so-MAT-ic
exotic = ex-OT-ic
```

-ID, stressed third to last syllable:

```
annelid = AN-nel-id
hominid = HOM-in-id
salmonid = SAL-mon-id
elapid = EL-ap-id
colubrid = COL-u-brid
```

Classical pronunciation

An estimated pronunciation from the Golden Age of Rome (80-14 C.E.) is used for the reading of ancient literature. This pronunciation differs greatly from English scientific Latin, and is more difficult to master. For example, Cicero is "kickero," Caesar is "Kysar," cervix is "kerwix," vertebrae is "wertebrye," major is "mahyoor," Thuja is "Tooya," and Vaccinium is "wakkeeniom." Some naturalists apply classical sound values to scientific names, and some employ hybrid pronunciations such as "fun-jee" for fungi. The English pronunciation is "funj-eye" and the classical is ~"foongh-ee." An excellent reference for classical pronunciation is *Vox Latina* by Sidney Allen (1988, Cambridge University Press, 133 pages.)

Selected References for English Scientific Latin

(Many more references are listed in THIS book).

Chandler, C. 1889. Pronunciation of Latin and Quasi-latin Scientific terms.

Bulletin of the Scientific Laboratories of Denison University, 4:161-176.

Else, G.F. 1967. The Pronunciation of Classical Names and Words in English. The Classical Journal, 62:210-214.

Gould, B.A. 1832. Adam's Latin Grammar. Boston: Hilliard, Gray and Company. Kelly, H.A. 1986. Pronouncing Latin Words in English.
Classical World, 80:33-37.