Tsimshianic Animal Names with Notes on Their Referents, Distributions and Origins

by
Brian D. Compton
First Nations House of Learning
The University of British Columbia
1985 West Mall
Vancouver, British Columbia V6T 1Z2
Canada

and
Marie-Lucie Tarpent
Department of Modern Languages
Mount Saint Vincent University
166 Bedford Highway
Halifax, Nova Scotia B3M 2J6
Canada

ABSTRACT.—A survey of linguistic and ethnographic materials on the Tsimshianic peoples yielded animal names referring to over 200 zoological taxa (including mythical or legendary creatures and entities). The distribution of these forms within the Tsimshianic languages further demonstrates the division between Maritime Tsimshianic (Coast and Southern Tsimshian) and Interior Tsimshianic (Nisgha and Gitksan). From comparisons with similar data from neighbouring languages, it is evident that many Wakashan forms—primarily from Haisla and Henaaksiala—have been borrowed into Coast Tsimshian and, perhaps, Southern, Tsimshian. Several other borrowings in the Tsimshianic zoological lexicon come from Tlingit, Athabaskan or other sources.

INTRODUCTION

It has long been known that a substantial part of the ethnozoological vocabulary of the Tsimshianic languages of British Columbia consists of borrowings from neighbouring languages (Rigsby 1968, Pinnow 1969), but no systematic and comprehensive study of Tsimshianic animal names has been presented until now. In this paper we have combined ethnobiological and linguistic efforts to compile the documented names for animals in the Tsimshianic languages—Coast Tsimshian, Southern Tsimshian, Nisgha and Gitksan. We have also presented here information regarding the known or probable scientific identifications of the referents of Tsimshianic animal names along with a discussion of their probable origins. The distributions of original as opposed to borrowed animal names in the various Tsimshianic languages offer clues to the histories and cultural and linguistic interactions of the Tsimshianic ethnolinguistic groups.

BACKGROUND

The Tsimshian, or Tsimshianic, ethnolinguistic groups comprise the Tsimshian, Nisgha and Gitksan of the North Coast and adjacent mainland region of British Columbia, Canada. The traditional homelands of the Nisgha are situated along the Nass River; the Gitksan, on the Upper Skeena River; the Tsimshian, along the lower portion of the Skeena River and the adjacent coast as well as on the coast and islands from the mouth of the Skeena southward to Milbanke Sound. Their languages may be grouped into two major subdivisions—Maritime Tsimshianic includes Coast Tsimshian spoken in several dialects in the major portion of the territory, and the nearly extinct Southern Tsimshian language, still spoken in Klemtu, on Swindle Island; Interior Tsimshianic includes Nisgha and Gitksan.

Over a century ago Franz Boas (1891) presented comparative data and observations for Tsimshian and two neighbouring languages—Tlingit and Haida. At that time Boas identified several animal names that he regarded as borrowings between these languages—data that were suggestive of past culture contact between these groups. More recently, Rigsby (1986), Compton (1993c, 1993d) and Tarpent (1994a) have prepared unpublished compilations of comparative Tsimshianic biological terms including probable borrowings. The primary goal of the current paper is to expand significantly on these past efforts through the presentation of the most comprehensive listing of Tsimshianic animal names possible at this time, with commentary on their referents, distributions, and probable origins.

METHODS

We have consulted the primary works containing information on Tsimshianic zoological terms, including Boas (1891, 1912, 1916) and Dunn (1978) for for Coast Tsimshian; Boas (1902), McNeary (1974) and Tarpent (1986) for Nisgha; and Hindle and Rigsby (1973) and Thistle-Walker (n.d.) for Gitksan. Some preliminary research has been conducted on Southern Tsimshian by Dunn and Tarpent, but no final report on this language has been presented to date. Secondary sources of data that we have used in the current study include Compton (1993a, 1993b), Hill (1993a), Hill (1993b) and Rigsby (1986) and several other sources as indicated in Table 1 and elsewhere in this paper.

RESULTS

We have compiled the Tsimshianic animal names and associated data from these primary sources in Table 1.[1] These data are ordered in rows within the following main zoological groupings (arranged in accordance with biological taxonomy): Cnidarians (Part 1), Worms (Part 2), Mollusks (Part 3), Arachnids (Part 4a), Crustaceans (Part 4b), Insects (Part 4c), Echinoderms (Part 5), Fishes (Part 6), Amphibians (Part 7), Reptiles (Part 8), Birds (Part 9), Mammals (Part 10). General "animal" terms are presented in Part 11 while mythical or legendary creatures appear in Part 12. Within these broad groupings data in the first column generally are listed in phylogenetic order and/or alphabetically by zoological Latin species name and/or English common name.[2] Each entry is numbered and multiple entries pertaining to a single species (or two or more zoological species represented by a Tsimshianic zoological taxon or several such taxa) are designated with sequential alphanumeric designations (e.g., 1, 2, 3a, 3b, etc.).

The vertical columns include 5 language columns and a Comments column. The first 4 language columns contain data in the Tsimshianic languages in an order that reflects their linguistic relationship. Coast Tsimshian and Southern Tsimshian can be grouped together as Maritime Tsimshianic, while Nisgha (N) and Gitksan (G) together are referred to as Interior Tsimshianic. Although Southern Tsimshian is geographically distant from Nisgha it is closer phonologically to Nisgha than is Coast Tsimshian, hence the placement of the Southern Tsimshian column next to the Nisgha column in Table 1.

Many animals are referred to by more than one name, even in the same language. The arrangement of rows in Table 1 is designed to show at a glance the grouping of cognates within the Tsimshianic family. Where possible, names common to all languages (with minor phonological modifications) are given first, followed by descriptive names, then by borrowings. This arrangement is not rigid, however, as categories may overlap. The absence of a word from a cell in Table 1 does not necessarily mean that it does not exist in any given language, only that it has not been recorded in the sources consulted in the current study.

The column labeled "Corresponding forms in non-Tsimshianic languages" contains forms that are very similar to those given in the Tsimshianic languages and are suggestive of borrowing. The presence of a word in this column does not indicate the direction of borrowing—this is dealt with in the "Comments" column, which quotes glosses and comments from the sources cited in abbreviated form between the quotes (see the References section for the abbreviations). This column also contains linguistic information such as the literal meanings of derivatives and compounds, as far as can be determined at this time.

Terms in the Tsimshianic languages presented in Table 1 are designated by the following abbreviations preceding the Tsimshianic animal names[3] or associated comments in the last column: CT (Coast Tsimshian), ST (Southern Tsimshian), N (Nisgha) and G (Gitksan). Other native language terms are designated by the following abbreviations: CH (Chinook language [not jargon]), CJ (Chinook Jargon), HA (Gm.) (Haisla), HA (Gl.) (Henaaksiala), Hco (Cowichan), HE (Kl.) (Klemtu dialect of Heiltsuk), HE (BB) (Bella Bella dialect of Heiltsuk), OO (Oowekyala), KW (Kwak'wala), No (Nootka), NU (Nuxalk), HD (Haida), HD (K) (Kaigani dialect of Haida), TL (Tlingit), CA (Carrier), BA (Babine) and SK (Sekani, spelled Sékanais by Morice [1932]).

In general, terms cited from Dunn (1978), Hindle and Rigsby (1973) and Thistle-Walker (n.d.) appear as they were originally presented while some other terms have been re-transcribed to facilitate comparisons across the languages dealt with in this paper.[4] Terms that have not been checked by a linguist for phonetic accuracy are designated with a diesis, or double dagger (‡). In general, single quotation marks are

---

[1] Compton, an ethnobiologist who has conducted ethnobiological research among the Southern Tsimshian and neighbouring Wakashan groups, compiled the nomenclatural and associated data presented in the current paper and is also responsible for the biological commentary presented here as well as for the typing of the paper. Tarpent, a linguist specializing in the Tsimshianic languages, checked or provided transcriptions and translations and is responsible for the linguistic classification and commentary. Tarpent's knowledge of Nisgha derives from her employment with British Columbia School District 92 (Nisgha) from 1977-80 and 1983-88, and during the summers of 1982, 1989-91 and 1993. Her Southern Tsimshian field work with Mrs. Violet Neasloss in 1991 and 1992 was supported by an internal grant from Mount Saint Vincent University and in 1993 by a grant from the Social Sciences and Humanities Research Council of Canada.

[2] To facilitate the use of Table 1 by individuals unfamiliar with zoological taxonomy, common English animal names are presented in alphabetical order in Appendix 1, along with their corresponding entry numbers from the table.

[3] No body part or animal product terms have been included in this study nor have any growth stage terms that simply incorporate elements meaning 'large' or 'small.' Growth stage terms that are linguistically distinct from the usual name for an animal and which seem to be species specific have been included here.

[4] Tsimshianic forms are given primarily in practical orthographies and the orthographic principles are similar throughout the Tsimshianic languages. The Nisgha and Gitksan alphabets, established by Rigsby, and the Coast Tsimshian alphabet, used by Dunn, have been in use in local communities for a number of years. For Southern Tsimshian, which has not had an official writing system, the practically oriented spelling adopted here makes use of appropriate elements of the Nisgha, Gitksan and Coast Tsimshian writing systems. Note that Coast Tsimshian uses plain x for its single back Velar fricative, while the other languages distinguish palatal x from back velar x̲. As these practical orthographies do not indicate stress, phonetic transcriptions have been retained from Dunn (1978) or have been added for the other languages where stress appeared unpredictable.

applied to indicate literal English translations while double quotations marks indicate less literal glosses or direct quotes from the cited sources.

It should be noted that the zoological Latin identifications presented in the first column of Table 1 are not based on any research involving the use of documented voucher specimens. Rather, they are postulated based on the reported English names and, in some cases, species descriptions, or they have been inferred through linguistic or other clues from comparable research that has involved the use of documented zoological vouchers (i.e., Compton 1993b).

It should also be noted that for Coast Tsimshian forms quoted from Dunn (1978), some information that appeared less relevant to this list has been omitted. Most plural forms have also been omitted.

Furthermore, some data presented in the Coast Tsimshian column may actually represent Southern Tsimshian data not specifically identified as such by Dunn (which may, for example, include terms originally designated by Dunn as from Hartley Bay but which have not been so identified in the current paper).

Table 1.—Tsimshianic Animal Names (arranged in general phylogenetic order)

Zoological Taxa	Coast Tsimshian Name (all terms cited from Dunn 1978 unless otherwise specified)	Southern Tsimshian Name (all terms recorded by M.L.T. or B.C. unless otherwise specified; VN = Violet Neasloss)[5]	Nisgha Name (all terms recorded by M.L.T. unless otherwise specified)	Gitksan Name (all terms cited from H&R73 unless otherwise specified; BR = B. Rigsby, pers. comm.; RW = R. Whalley, pers. comm.)	Corresponding Forms in Non-Tsimshianic Languages	Comments (including glosses as presented by sources cited in other columns)
Part 1 - Phylum Cnidaria (Cnidarians: Jellyfish, Sea Anemones and Their Relatives)						
(1) Jellyfish (various species of Class Hydrozoa and Class Scyphozoa, including Aurelia aurita [Moon Jellyfish] and Cyanea capillata [Sea Nettle])	wakawaa	wak'awaa	wak'awaa		cf. HA ʼnàuqʷayak, HE ʼnáúqʷáyáx, OO ʼnauqʷayax (L&R80)	CT, ST, N: "jellyfish;" "Aurelia aurita (moon jellyfish), Cyanea capillata (sea nettle" (H93b); N <CT <borrowing?
(2) Coral? (or Coralline Algae?)[6]	sganmooksgm ts'm'aks				cf. HA cìẇas hs_wn̓q̓ (HA translation of CT form)	CT: "precious coral, "sponges, esp. dead man's fingers (lit. crabapple in the water)"
(3a) Sea Anemone (Anthopleura xanthogrammica, Giant Green Anemone), and/or other species of Class Anthozoa)	dagaʼaw [dəgəʔáw]					CT: "sea anemone"
(3b) Sea Anemone (?Metridium senile, Plumose Anemone and/or ?Tealia crassicornis, Red and Green Anemone)	masxaylóop	masxay lo'op				CT: "metridium anemone" (i.e., Metridium sp.) (D78); "Tealia crassicornis (red and green anemone)" (H93b); ST: "sea anemone;" lit., 'white on rock'?
Part 2 - Worms (Phylum Platyhelminthes, Phylum Rhynchocoela or Nemertina, Phylum Sipuncula, Phylum Annelida and others)						
(4a) Worm, Earthworm (probably including various species of Phylum Annelida, Class Oligochaeta, and others)	laalt, láalt	laalt	lalt	lalt		CT, ST, N, G: "worm," also "snake" (cf. caterpillar)[7]
(4b) Worm, Earthworm			laldim haywis	laldim wis		N, G: "earthworm," lit., 'worm of rain'
(4c) Worm, Earthworm				laldim yip (BR)		G: "earthworm," lit., 'worm of ground' (translation of English name?)
(5a) Marine Worm (?Nereis vexillosa, Piling Worm, Mussel Worm or "Sand Worm)[8]	xts'íik				HA ʼnzi̓q̓, 'worm, ghost,' HA ʼnazi̓q̓x̌λawà or HA ʼnazi̓q̓x̌λawàɬ, 'caterpillar;' HE ʼnzí, "frog," OO ʼnzɬ, "susquatch" (L&R80)	CT: "ribbon worm" (possibly a reformation on a Wakashan borrowing)
(5b) Marine Worm	laaldm ts'm'aks (R86)					CT: "sea worm" (used as bait), lit., 'worm/snake of in water' (possibly translation of English "sea worm")
(5c) Marine Worm	t'mgyels (BR)[9]					CT: "sea worm" (found near blue mussels, used as bait); t'm-, prefix, gyels, 'mussel;' also see blue mussel
(6a) Leech (Class Hirudinea)	t'iimu [t?i·mú·]					CT: "leech" (a borrowing?)
(6b) Leech				hislok'xwit (R86)		G: "leech;" lit., 'pretends to be lamprey'
Part 3 - Phylum Mollusca (Mollusks: Chitons, Snails and other Univalves, Bivalves, Cephalopods and Their Relatives)						

[5]The data presented in this column derive exclusively from Tarpent's work with Violet Neasloss but are verified in a minimal way by information provided to Compton by Mrs. Neasloss as well as Mr. William Robinson and the late Louisa Hall during field research in Klemtu in 1989 (Compton 1993a).

[6]This term may refer to articulated coralline algae (e.g., Bosiella spp. and Corallina spp.) rather than to corals. The Henaaksiala equivalent of this term (cìẇas hs_wn̓q̓, literally, 'Pacific crabapple tree-of-below [the sea]') is reputedly translated from the Tsimshian term and refers to articulated coralline algae (Compton 1993a).

[7]'Worm' must be the older meaning, as the Coast Tsimshian term for snake is derived from it. From this word is also derived Nisga'a laltkw and Coast and Southern Tsimshian laaltk, 'slow' (which makes more sense for 'worm' than for 'snake').

[8]This species has been identified as the worm that is considered among the Henaaksiala to poison shellfish (Compton 1993b).

[9]Nereis vexillosa is often found in association with mussel beds (Kozloff 1983), a fact which would suggest that this species is meant by the Coast Tsimshian term that incorporates the term for 'edible mussel.'

(7) Cryptochiton stelleri (Gum Boot Chiton)	ts'ak	ts'ak				CT: "China slipper," "giant chiton," "gumboot;" cf. clam
(8) Katharina tunicata (Black Katy Chiton)	yaanst; 'yens (D78); 'yaanst (H93b)	ẏaans	ẏaans(t)			CT: "sea prune," "black Katy chiton" (D78); "Tonicella lineata (lined chiton)" (H93b); ST, N: "sea prune;" N word borrowed from CT (but Boas' [B12] transcription of the word seems to indicate glottalized ẏ)
(9) ?Mopalia hindsi (a chiton, no common name) and/or other Mopalia spp.	'yensagawgaw					CT: "crow chiton," "hairy mopalia (Mopalia hindsii);"[10] cf. Katharina tunicata
(10a) Snail and/or Slug (Class Gastropoda)	hadza'üült [hàʒɑʔí·ltʰ], ha'tsi'uul [hàʔcʾiʔú·l]	hats'i'ẅẅl(da)				CT, ST: "snail"
(10b) Snail and/or Slug			gwaatl'ax	kw'aat'ax	HA q̓ʷadàs, 'slug/snail;' HE q̓ʷádás, OO q̓ʷadas, KW *q̓ʷat̓x̌, 'snail' (L&R80)	N, G: "snail, slug" (probably borrowed from Wakashan)
(11) Unidentified "Whelk" (possibly various species of Buccinidae and/or Nassariidae)			‡daganuu (M74)			N: "whelk;" cf. hermit crab
(12) Acmaea pelta (Shield Limpet) and others	gayda ts'u'uts (H93b)					CT: "Collisella pelta [syn. Acmaea pelta] (shield limpet)" (H93b); used in N for "mushroom," lit. 'hat of bird'
(13) Haliotis kamtschatkana (Northern Abalone)	bilhaa [bɩlhá·], blhaa [bl̩há·], bülhaa [bɨlhá·]	bilhaa [bilhá·]	bilaa [bɪlá:]	bilaa	HA pl̩x̌.h̓à, 'abalone; flower, blossom' NU plxani, "inner surface of abalone shell" (N90)	
(14) ?Bankia setacea (Pacific Shipworm) and/or ?Teredo navalis (Common Shipworm) and/or Unidentified Wood-boring Larva?	gyiwałgn [gʸiwʌ́łgn], k'yiwałgn [kʸʔiwʌ́łgn̩]		k'uuhlgan	k'uuhlxan		CT: "ship worms;" N, G: "wood grub;" lit., 'wood-borer" (N <k'uxw, 'to bore something, split something with wedges'); contains -gan, 'wood'
(15a) ?Clinocardium nuttalli (Cockle)	gabook		gabook			CT, N: "cockle"
(15b) ?C. nuttalli		spuus				ST: "cockle;" cf. ST term with CT data for weathervane scallop
(16) Mytilus californianus (California Mussel)	hagwn, hagwn, ha'kwn	hagwin	hagwin		HA hàǧʷn̩, 'California mussel'	CT: "(Northern) horse mussel," "oyster,"[11] "(large) mussels"
(17) M. edulis (Edible Mussel)	gyels	gyals	gals [gʸals]	gyels	cf. HD (K) :hal, "Mytilus edulis" (B91); HD gál, 'mussel' (L77)	CT: "(blue) mussel;" ST, N: "mussel;" G: "blue mussel;" see ribbon worm
(18a) ?Pecten caurinus (Weathervane Scallop), or possibly Siliqua patula (Razor Clam)[12]	k'ał'an [kʔɑłʔɑ́n], k'ał'on [kʔɑłʔɔ́n]		k'ahl'ún	k'ahl'ún		CT: "scallops;" N: "razor clam;" G: "scallop;" k'ohl, 'cut something' + ʔun, 'hand' ('hand' part not used independently); stress mark added on N, G forms
(18b) ?P. caurinus and/or Chlamys hastata (Pink [Spiny] Scallop)	'n̩łgabuus [ʔn̩łgɑbú·s]					CT: "scallop (Chlamys hastata);" form probably means 'cockle shell;' (-buus, cf. ST spuus)

[10] This spelling of the zoological Latin name for this organism is commonly encountered, although Turgeon et. al. (1988) gives the spelling as shown in column one. Ellis and Wilson (1981) report that among the Skidegate Haida an unidentified chiton is known as xwúuya t'áagaa, "raven's chiton." Other species of Mopalia, i.e., M. lignosa (hairy chiton) and M. mucosa (mossy chiton), are similar in appearance to, and perhaps more commonly encountered than, M. hindsi (cf. Kozloff 1983) and may also be regarded as types of "crow chitons."

[11] This may represent an error of identification or a semantic extension of the Coast Tsimshian 'California mussel' term to include the introduced species, Crassostrea gigas (Japanese oyster, Pacific oyster) but probably not the native oyster, Ostrea lurida.

[12] The additional possibility exists that these terms may actually refer to Hinnites giganteus (purple-hinged rock scallop), the only scallop that has been associated with a Haisla/Henaaksiala term.

(19) ?Protothaca staminea (Native Little-neck Clam, "Butter Clam")	sam'k [sʌm?q˃], sam'x [sʌm?x̣], sem'k [sɛm?q˃]	samk'	samk'			CT, ST: "butter clam;" N: "Protothaca staminea?" (M74); root *sem, 'tightly closed'?
(20) ?Saxidomus giganteus (Butter Clam)	ts'a'a [c?á?a], ts'ak [c?aqʰ], ts'ax [c?ax̣]	ts'a'x	ts'ak'	ts'ak'		CT, ST: "clam;" CT: "Saxidomus giganteus (butter clam)" (H93b); N: "Saxidomus giganteus?;" G: "clam;" root c'aq same as "nose, beak" (lit., 'protrusion')
(21) Tresus capax and/or T. nuttalli (Horse Clam or Gaper)	loon, lóon		lo'on	lo'on		CT, N: "horse clam;" G: "a large clam" (M74)
(22) Sea Shell (in general?), including Calliostoma ligatum (Western Ribbed Top-shell) and Thais lamellosa (Wrinkled Purple)[13]	'nɬts'iik, 'nɬts'iik [?n̥ɬc?í·kʰ], ts'íiga (D78); ‡tsiik (H93b)					CT: "sea shell;" "top shells" (D78); "small and large sea snails" (R86); "Calliostoma ligatum (blue top shell), Thais lamellosa (wrinkled whelk), Notoacmea scutum [syn. Acmaea testudinalis scutum] (plate limpet)" (H93b); Dunn's term probably refers specifically to the shell (see "scallop")
(23a) Octopus and/or Squid (?Loligo opalescens, Opalescent Squid; ?Rossia pacifica, Stubby Squid; ?Octopus leioderma, Smoothskin Octopus; and/or O. rubescens, Red Octopus)	hats'al [hac?ál], hats'al [hac?ál], hats'alt [hac?altʰ]	hats'alt	hats'alt	hats'alda		CT: "devil fish," "octopus," "squid;" ST: "octopus;" N: "small [edible] octopus;" G: "octopus;" cf. CT, ts'al, N ts'al̓, 'face, eyes;' suffix -t, -da
(23b) Octopus and/or Squid (?Octopus dofleini, Giant Pacific Octopus and ?Moroteuthis robusta, (North Pacific Giant Squid)	xbihats'al [x̣bihac?ál]		xbiits'al̓tkw			CT: "devilfish," "giant squid," "giant octopus" (D78); "half cuttlefish" (a crest symbol) (B91); N: "large [inedible] octopus" (lit., 'half faced')
Part 4a - Phylum Arthropoda (Arthropods: Arachnids [Spiders, Ticks and Their Relatives])						
(24a) Spider (Order Araneida)	sgyet, sgyit	sgyat				CT, N: "spider"
(24b) Spider (and/or "Grasshopper" [Order Orthoptera?])	wiliingyit [wɩlí·ngʸɛ́tʰ]					CT: "grasshopper," "spider...especially a large spider, which, if found in the house, is a omen of death;" wiliin- possibly related to suwiliin, 'to chase, hunt something;' term contains term for 'people'
(24c) Spider			gadalee, gadaalee	gadalee		N, G: "spider" (possibly borrowings of unknown origin)
(24d) Spider				aphleek (T-Wn.d.)		G: "spider"
Part 4b - Phylum Arthropoda (Arthropods: Crustaceans [Crabs, Shrimps, Barnacles and Their Relatives])						
(25) ?Limnoria lignorum (Gribbles or "Pin-worms")	sts'oolalop, süts'oolalop					CT: "marine isopods;" lit., 'beaver of rock'?[14]
(26) Balanus spp. and/or Chthamalus spp. (Barnacles)	ts'maay [c?m̥á·y] (D78); ‡tsmaat (H93b)		ts'imaaỷ [ċimá·ỷ]		HA c̓ùc̓m̥, '(small) barnacle;' HE ts!ō´ᵋmax·, 'barnacle' (B28); OO/KW c̓uc̓um̓a, 'barnacles' (L&R80); NU suts'mus, 'barnacle' (N90)	CT, N: "barnacles;" CT: "Balanus cariosus (thatched acorn barnacle), B. glandulus (common acorn barnacle), B. nubilus (giant acorn barnacle, barnacle)" (H93b); probaby reformation on borrowing (from Wakashan?)
(27) ?Cancer magister (Dungeness Crab)	galmoos; gal'os [gal?ɔ́s], gal'o'os [gal?ɔ́?ɔs]	k'almoos	k'almoos	k'al moos		CT, ST, N, G: "crab" (moos, 'thumb')

[13] Several species of Calliostoma occur throughout the Northwest Coast area, including C. annulatum (ringed top-shell), C. canaliculatum (channeled top-shell), C. ligatum (western ribbed top-shell), and C. variegatum (variable top-shell) (Abbott 1990). The term reported by Dunn may also likely refer to other univalves with spiralling shells. Furthermore, the term shown here may actually be the same as that given in the preceding row.

[14] The association of beaver with this organism suggests its identification as Limnoria lignorum, an isopod that burrows through wooden structures exposed to sea water.

(28) ?Chionoecetes bairdi (Baird's Crab) and/or ?Hyas lyratus (Spider Crab)	k'almoosgm laxsga'niis [qʔɑlmɔ́·sgm̩ lɑ̀x̣sg̣ɑʔní·s]					CT: "spider crab;" (lit., 'crab [suffix] [suffix] on mountain [sga'niis]'), see dungeness crab
(29a) Pagurus spp. (Hermit Crabs)			‡t'aakimuu (M74)			N: "hermit crab Pagarus sp.;" cf. N "whelk;" may be borrowing[15]
(29b) P. granosimanus (Granular Hermit Crab), P. hirsutiusculus (Hairy Hermit Crab)				magaay gawits (H93b)		G: "Pagurus granosimanus [sic] (granular hermit crab), P. hirsutiusculus (hairy hermit crab)" (H93b)
(30) Unidentified "Crab"				k'yaam (RW)	could be from @@k̓a·ʔam, lit., 'most good'	G: small crab [ca. 3" across, including legs, when stretched out, according to illustration], lives in fresh water creeks, edible, olden days - on dried seaweed would crush the crabs, take the bits of shell out and eat them (RW)
Part 4c - Phylum Arthropoda (Arthropods: Class Insecta [Insects])						
(31a) Dragonfly and/or Damselfly (in general, Order Odonata)	gyilats'i'ts, gyilats'i'dz [gʸɩlacʔíʔiʔcˀ]					CT: "dragonfly;" cf. CT 'robin'
(31b) Dragonfly and/or Damselfly			doqaqesit [doqaqísit]			N: "dragonfly," lit., 'hair-taker,' qes, 'hair'
(31c) Dragonfly and/or Damselfly				halíbasm ts'ók' (RW)		G: "dragonfly" (lit., 'needle of salmon belly'?); cf. N @@ts'ok, 'salmon belly'
(32) "Grasshopper" and/or "Cricket" (Order Orthoptera)	(see spider)		m̓ism̓oots'	mism̓oots(') (BR)	HD mā́mats'ikyē, 'dragonfly' (said to be borrowed from Tsimshian by B91); also reported by Swanton (1911) as māmatc!êgî	G: "grasshopper," "cricket" (R86); cf. CT 'spider' and G 'chicken hawk;' reduplication on stem *moots('), cf. m̓oots'iks, 'breast, to suck;' in HD, form mā́mats' could be archeic Tsimshianic plural on same stem, moots' with HD suffix added; also see spider and/or grasshopper
(33a) Pediculus humanus (Head and Body Louse) and/or Phthirus pubis (Crab or Pubic Louse)	ts'askw [cʔaskʷʰ], ts'eskw	ts'askw	ts'iskw			CT, ST, N: "louse"
(33b) P. humanus and/or P. pubis				t'a		G: "louse" (possibly a borrowed form of unknown origin)
(34) Unidentified Beetle (Order Coleoptera)	k'albiin [qʔɑlbí·n]					CT: "beetle" (cf. thrush)
(35a) Butterfly (Order Lepidoptera, Suborder Rhopalocera)	baxbogm gyemk [bɑx̣bɔ̀g̣m̩ gʸɛ́mkʰ]	baxbogam gyamk				CT, N: "butterfly;" gyemk, 'sun'
(35b) Butterfly	adabiis [ʔàdabí·s]					CT: "butterfly," "beautiful (non-human subject);" ada-, cf. adagan (D78), lit., 'fungus on tree'
(35c) Butterfly			m̓ask'aawadax	mask'awoodax		N, G: "butterfly"
(35d) Butterfly (?Papilio eurymedon, Black and White Swallowtail; ?P. zelicaon, Anise Swallowtail)[16]				ganxya'a		G: "butterfly species (orange in colour);" "tiger swallowtail butterfly" (T-Wn.d.); gan, 'means of, reason why,' x, 'eat,' ya'a, 'spring salmon'

[15] This term may be the same as given by McNeary (1974) elsewhere for "whelk." If so, it would appear that the Nisga'a may name hermit crabs by reference to their shells, as is the case with the Henaaksiala and, perhaps, Haisla, who simply refer to hermit crabs as "(sea) snail (shell)" (Compton 1993b). Note that Carl (1963) reports that at least one common hermit crab, Pagurus granosiminus (granular hermit crab), is known for using empty whelk shells for protection.

[16] These two swallowtails are distributed widely within British Columbia (Jones 1951) and represent the most likely candidates for the "swallowtail" terms reported for Gitksan.

(35e) Butterfly				hisbiliks (H&R73); hisxbilksit (T-Wn.d.)		G: "butterfly species" (H&R73); "caterpillar" (T-Wn.d.); his-...-s, 'pretend to...;' stem *xbilk-; cf. CT xbóolg-, in xbóolgn, "night birds"
(36a) Moth (Order Lepidoptera, Suborder Heterocera)	waxwox [waxwóx̣]					CT: "moth;" cf. N, G 'bat'
(36b) Moth			majiluulak̲' [macilú·laq̓]	majiluulak̲'	cf. CA musdziyaz, "moth" [lit., 'little owl'] (CLC74)	N, G: "moth;" N <luulak̲', 'ghost' (moth term possibly borrowed from Carrier);[17] cf. G 'nighthawk'
(37a) Caterpillar (Larval Lepidoptera, possibly Isia isabella, Banded Woolybear)	x̣ɛ̓ɩnɔ́:su (B16)		matxanoosik' [matx̣anó·sik']	noosik'		CT: "caterpillar" (a crest symbol, cf. wolverine); N: "caterpillar" (cf. N 'wolverine' and CT 'snake'); G: "caterpillar;" homophonous with N 'wolverine'
(37b) Caterpillar (Unidentified Lasiocampidae, Tent Caterpillar?)			saṅakw'a	sanakwa	perhaps a Tsetsaut borrowing?	N: "tent caterpillar;" G: "caterpillar;" G form probably a loan (R86); Athabaskan loan?
(37c) "Inchworm" (Larvae of Geometridae and/or Noctuidae?)				saq'anst		G: "inchworm;" cf. N sak̲'ans, sak̲'ansdii [sáq̓ans] 'span'
(38a) Unidentified Diptera (Fly and/or Black Fly and/or Mosquito)	gyiik, gyíik	giik			cf. HA q̓ìx̌a, HE q̓ìx̌a, OO q̓ix̌a, KW *q̓iɬa, 'mosquito' (L&R80)	CT: "fly," "mosquito;" ST: "black fly," "mosquito"
(38b) Unidentified Diptera (Coho Fly or Horse Fly)	gyíigm̲'üük̲ [gʸɩʌ̀gm̥ʔí·qʰ]					CT: "coho fly," "horse fly;" <gyiik, "fly" + ʔüük̲, 'coho salmon'
(38a) Unidentified Diptera (Fly and/or Black Fly and/or Mosquito)			biyooskw	biyoosxw		N: "fly," "black fly," "mosquito;" G: "fly," "mosquito;" N, G root or stem yoo, 'skewered'?
(38d) Unidentified Diptera (Black Fly)				axg̲abitxwt		G: "blackfly;" perhaps loan translation of English "no-see-um" (R86)
(38e) Unidentified Diptera (Mosquito)				[wit'a(x̲) g̲ats'ag̲at]		G: "mosquito" (T-Wn.d.); G form means "those with big noses" (R86)
(38f) Unidentified Diptera (Horse Fly)				walʔe·q (R86)		G: "horsefly," <walx-ʔeek̲, 'to pack something + coho salmon'
(39a) Diptera Larva (Mosquito)	xsaan [x̣sa·n]					CT: "mosquito larvae," "mosquito pupae"
(39b) Diptera Larva (Mosquito)	g̲ab̲alaas [g̣ɑbɑlá·s], g̲a'pilaas [gʌʔpʾɩlá·h]				HA ǧiǧìbala, 'red alder catkin;'[18] neither the CT nor the HA term is analyzable	CT: "mosquito larvae and pupae;" CT also 'bat'
(40) Diptera Larva (Maggot)			smaaẇin	smaẇn		N, G: "maggot"
(41a) Flea, probably various species including Pulex irritans (Human Flea), Xenopsylla cheopis (Oriental Rat Flea or "Common Flea"), Ctenocephalides canis (Dog Flea) and C. felis (Cat Flea)			ẏint', ẏint'uxw	int'		N: "flea," "nits;" G: "flea"
(41b) Flea				k'ipt'a (R86)		G: "flea," lit., 'small louse;' (probably 'small lice')

[17] The possibility exists that this may represent a reformation of a borrowing from Carrier where one or more moths—especially ceanothus silkmoth or California silkmoth (Hyalophora euryalus [Boisduval], Saturniidae)—are referred to as mesdzih-yaz (literally, 'little owl') (Compton and Gardiner 1993).

[18] Among the Henaaksiala, this is the name for red alder (Alnus rubra) catkins (floral structures) when they fall into standing water at which time they are believed to turn into mosquito larvae (Compton 1993a).

(42) Ant (?Camponotus spp. [Carpenter Ants] and others)	gasgadzax [gasgáʒʌx], k'ask'adzn [qʔasqʔáʒn̩]	k'ask'odzax	k'ask'ojinx(t)	gansgojinxt (BR)	cf. HA k'azanìć, 'ant' (√k'hs-, "to pinch, claw, grip" [L&R86]); HE k·!ā́dzalits!ē, 'ant' (B28); KW k·!ā́dzalats!ē, 'ant' ("loose objects in hole on ground") (B47)	CT, ST, N, G: "ant;" ST form said to be CT; root k'ask'ots, pl. of k'ots, 'cut something;' G form may be a reformation
(43) Bee/Bumblebee/Wasp (e.g., Apis spp. [Bees], Bombus spp. [Bumblebees] and Vespula spp. [Wasps])	ap [ʔapʰ] (sg.?)	ap	ap	ap	CT form said to have been borrowed from Athabaskan (B91) but no comparable terms reported by K77, M32	CT: "bee, bumblebee, wasp;" ST, N: "bee, wasp, etc.;" G: "bumble bee," "honeybee," "yellowjacket"
Part 5 - Phylum Echinodermata (Echinoderms: Sea Stars, Sea Urchins, Sea Cucumbers and Their Relatives)						
(44) "Starfish," i.e., Class Asteroidea (Sea Stars) and Class Ophiuroidea (Brittle Stars), e.g., Henricia leviuscula (Blood Star), Pisaster ochraceus (Purple or Ochre Star) and Pycnopodia helianthoides (Sunflower Star)	gamaats, gamaadz [gamá·cʰ]	gamaats	gamaats	gamaats		CT, ST, N: "starfish;" CT: "Henricia leviuscula (blood star), Pisaster ochraceus (purple or ochre star), Pycnopodia helianthoides (sunflower star)" (H93b); G term reported for "starfish" by H&R73), i.e., gasgaats, was apparently confused with term for 'spiny dogfish;' stem *maats, ?
(45) ?Strongylocentrotus droebachiensis (Green Sea Urchin) and/or "Sand Dollar" (e.g., Dendraster excentricus)	asoot', asuun, asuut					CT: "sea egg," "sand dollar," "sea urchin (spec. Strongylocentrotus droebachiensis)"
(46) Strongylocentratus franciscanus (Red Sea Urchin) and S. purpuratus (Purple Sea Urchin)	dzügwiits	ts'ikw'i'its	ts'ikw'its' [ć'ikw'íć]		HA ćk̓ʷić, 'red sea urchin, purple sea urchin;' HE ćk̓ʷíć, 'sea urchin' (R81); NU ts'ikw'its', 'sea urchins' (N90)	CT: "large sea urchin (spec. Arbacia punctulata, Strongylocentrotus franciscanus, Echinometra lacunter;"[19] "Strongylocentrotus franciscanus (red sea urchin), Strongylocentrotus purpuratus (purple sea urchin)" (H93b); N, G: "sea urchin"
(47) ?Parastichopus californicus (California Stichopus)	gyenti [gʸɛ́ntʰi]	gyantx [gʸantç]	‡gentk (M74)			CT, ST, N: "sea cucumber;" CT: "Stichopus californicus (giant sea cucumber)" (H93b)
Part 6 - Fishes (Class Cyclostomata [Lampreys and Their Relatives], Class Chondrichthyes [Sharks, Skates, Rays and Their Relatives] and Class Osteichthyes [Bony fishes])						
(48) Fish (in general? probably only Oncorhynchus spp.)	hon, hoon, hóon	hoon	hoon	hon		CT, N: "fish;" ST: "salmon;" G: "anadromous fish, salmon (but also includes steelhead trout)"[20]
(49) Lampetra tridentata (Pacific Lamprey) and possibly other Lampetra spp. (Lampreys)	lo'k, lo'ox		loK	loK		CT, N, G: "eel;" also see wolf-eel
(50a) Shark (in general, reportedly especially Prionace glauca, Blue Shark)	ksaa, ksah					CT: "shark (esp. blue and hammerhead"[21]
(50b) Shark (in general)			k'aat [q̓a·t]		HD k·'āt; k·'ā́qata ā́ora - shark; = dog fish mother (B91:191)	N: "shark;" HD form probably borrowed from Tsimshian
(51) Squalus acnathias (Spiny Dogfish)	gagaats, gatsgaats	gasga'ts [gasgáʔac]	gasgaats(')	gasgaats(')		CT, ST, N: "dogfish;" also see starfish; stem *gaats?

[19] One reported referent of the Coast Tsimshian term (Echinometra lacunter) is not found within the Northwest Coast region (Meinkoth 1981).

[20] These terms likely all refer to anadromous salmonids, including steelhead trout, rather than to the English or scientific concept of "fish" (including all marine and fresh water fishes). Compare, for example, the Haisla and Henaaksiala term mia, which is sometimes translated as "fish" but actually refers only to any of the five native salmon and steelhead trout (Oncorhynchus spp.). A separate Haisla and Henaaksiala term (magl̩ìs) serves to denote most or all other fish (Compton 1993b).

[21] Hammerhead sharks (Sphyrnidae) are not among the eleven shark species that occur within British Columbian waters.

(52) Skate (in general), probably including Raja spp. and others (seven species occur within B.C. waters)	gandah [gandáh], gandeh [gandéh], k'andah [q?andáh]					CT: "skate," "ray"
(53) Hydrolagus colliei (Spotted Ratfish)	guumaa [gu·má·]				HA gumàx̌s, 'spotted ratfish;' HE (Kl.) gʷúmá, HE (BB) gʷúmáǧa, OO gʷumaǧa, KW gumaǧa, 'ratfish' (L&R80); NU quma, unidentified salt water fish, said to be called "Lard-fish" by white men. (M92)	CT: "angel fish," "chimara," "rat fish (spec. Chimaera affinis and Hydrolagus colliei);"[22] probably a Wakashan borrowing
(54) Clupea harengus (Pacific Herring)	skah, tskah, tskah	tsga(h)	sga [sgʸa]			CT: "(Pacific) herring," "American shad," "alewife;"[23] ST, N: "herring"
(55) ?Coregonus clupeaformis (Lake Whitefish) and/or ?Prosopium williamsoni (Mountain Whitefish)			hloots'	hloots'	could be same as CA ɬhooz, an unidentified small fish (FA)	N: "Rocky Mts. whitefish" (R86); G: "whitefish"
(56a) Oncorhynchus spp. (Salmon [in general])	hon, hoon, hóon	hoon	hoon	hon		also see fish (in general)
(56b) ?Oncorhynchus spp.	dzalee [ʒʌlé·]	dzila			HA zɬak, HE zɬák, OO zɬak, KW zlak, "old deteriorating salmon (after it has spawned)" (L&R80)	CT: "old fish" (D78), "old dog salmon" (R86); ST: "old salmon"
(56c) ?Oncorhynchus spp.	laanmhóon [là·nm̥hɔ́ʌn]					CT: "female fish" (<"roe," "fish")
(56d) ?Oncorhynchus spp.	loomhóon [lò·mhɔ́ʌn]					CT: "male fish"
(57a) O. gorbuscha (Pink or Humpback Salmon)	sti'moon [stɪ?mɔ́·n], stm'oon [stm̥?ɔ́·n], stmóon [stm̥ɔ́ʌn]	stim̓oon	sdim̓oon	sdim̓oon	CA stem·oñ, "(probably a loan word), hump-back salmon" (M32)	CT, ST, N, G: "humpback salmon" (originally probably sdim- <sdo'om, 'side of' + hoon, 'fish')
(57b) O. gorbuscha	gadoolt' [gadɔ́·lt'ʰ]					CT: "male humpback salmon;" lit., 'humped up? cf. N gaduu(hl), 'hump,' completive suffix -(?)lt
(57c) O. gorbuscha			txansdim̓oon			N: black colour phase of humpback salmon (R86); lit., 'old, spawned out humpback salmon'
(58a) O. keta (Chum or Dog Salmon)	gayniis [gayní·s], gaynis [gáynis]	gayniis	ganiis	ganiis	HA ǧʷàx̌n̥is, HE ǧʷáx̌n̥ís, OO ǧʷax̌n̥is, KW ǧʷax̌.n̥is, 'dog salmon' (L&R80)	CT: "chum salmon," "dog salmon;" ST, N, G: "dog salmon;" N <CT?; CT itself a borrowing?
(58b) O. keta	ɬgum'yee, gakɬgum'yee [ɬgum?yé·], [gakɬgum?yé·]					CT: "old dog salmon"
(58c) O. keta			k'a'it [q̓a?ɪ́t]	k'a'it		G: "the old word" (R86)
(58d) O. keta			txank 'a'it			N: "dog salmon," "in yellow colour phase" (R86); lit., 'old, spawned out chum salmon'
(59a) O. kisutch (Coho or Silver Salmon)	ẅaak [ÿʌ·qʰ], ẅaax [ÿʌ·x̌], ẅak [ÿʌqʰ]' ẅax [ÿʌx̌], ẅüüx [ÿï·x̌], üük [?ï·qʰ], üüx [?ï·x̌]	ẅẅx	‡eek (M74)	eek		CT: "coho salmon," "silver salmon;" ST, N, G: "coho salmon;" also see coho fly

[22] Perhaps Squatina californica (Pacific angel shark) is meant by Dunn's reference to "angel fish." This species has been recorded off the Canadian coast and the Californian coast. Note, however, that Chimaera affinis is not reported as occurring within British Columbian waters (Scott and Crossman 1973).

[23] Alosa pseudoharengus (alewife) does not occur within British Columbian waters and A. sapidissima (American shad) is an introduced species within British Columbian waters (Scott and Crossman 1973).

(59b) O. kisutch	ksihoon [ksɪhó·n]					CT: "coho salmon (turned red);" term contains general "salmon/fish" term
(59c) O. kisutch			txan'eek			N: "in later, red colour phase" (R86); lit., 'old, spawned out coho salmon'
(59d) O. kisutch			hanluulak'			N: "in later, red colour phase" (R86) (lit., 'salmon ghost')
(59e) O. kisutch				gimilak		G: "small coho salmon" (H&R73); "small female coho, ready to spawn" (T-Wn.d.); cf. N gimii-, direction proclitic?
(60a) O. nerka (Walbaum) (Sockeye or Red Salmon, and Kokanee Salmon)	müsoo [mɨsó·]	miso'o	miso'o	miso'o		CT: "sockeye salmon," "blueback salmon," "red salmon;" ST, N, G: "sockeye salmon;" root *mes-, 'red'
(60b) O. nerka	gyigɨ [gʸí?ʌɨ], gyíiɨ [gʸíʌɨ], gyi'i'tɨ [gʸí?i?tɨˀ], gyí'tɨ [gʸi?tɨˀ]		gitl'	gitl'		CT: (male) in red (spawning) phase (D78, H&R73); root probably related to root gahl-, 'pierce(d), spear(ed)'
(60c) O. nerka			txanmiso'o			N: "old spawned-out sockeye" (R86); lit., 'old, spawned out sockeye salmon'
(60d) O. nerka	kxaa'o [qxá·?o]					CT: "female sockeye salmon"
(60e) O. nerka ("Pygmy Sockeye Salmon")[24]	ts'üwaasmmüsoo [c?ɨwá·sm̩mɨsó·]					CT: "pygmy sockeye salmon;" <ts'üwaas [c?ɨwá·s], also glossed as "young salmon...about 12"" (R86)
(61a) O. tshawytscha (Chinook, Spring or Jack Salmon)	yee [yɛ·], yeeh [yɛ·h], yéeh [yɛʌh]	yi'e/xɪ'e [yí?ɛ/çí?ɛ]	ya'a	ya'a		CT: "spring salmon," "Chinook salmon," "king salmon;" ST, N, G: "spring salmon;" see Dolly Varden
(61b) O. tshawytscha	hoonhiisuunt					CT: "spring salmon" (B91), lit., 'salmon-as soon as-summer' (hii-, 'as soon as, beginning of,' suunt, 'summer')
(61c) O. tshawytscha			hangwooyim			N: gwooyim, 'spring'
(61d) O. tshawytscha			hlgu ya'a	hlguya		N, G: "small (jack) spring salmon"[25]
(62a) Salmo gairdneri (Rainbow and Steelhead Trout)	meliit [mɛlí·tʰ], miliit [mɪlí·tʰ]	miliit	milit [mílɪt]	milit		CT: "rainbow trout," "steelhead;" ST, N, G: "steelhead"
(62b) Salmo gairdneri	laawmmüliit [là·ümmɨlí·tʰ]					CT: "steelhead;" lit., 'trout of steelhead' (possibly translation of English "steelehad trout"); cf. trout
(62c) Salmo gairdneri			‡ankwsa milit (M74)			N: "rainbow trout" (lit., 'cooked steelhead'
(63) Salvelinus malma (Dolly Varden)			‡sabaya'a (M74)	saabaya'a		N: "Dolly Varden Salvelinus malma;" G: "Dolly Varden trout;" (probably borrowing); see spring salmon
(64) ?Salvelinus namaycush (Lake Trout)	laaẅ [la·ü], laẅ, lakläẅ [läü], [lʌkläü]	laax, laaxw	laaxw	laaxw		CT, ST, N, G: "trout;" cf. steelhead
(65) ?†Notemigonus crysoleucas (Golden Shiner or "Minnow")[26]	t'axt'óosk [t?ʌxt?ó·ʌsk^{h}], t'axtxóogn [t?ɑxtxó·ʌgn]					CT: "golden shiner (Notemigonus crysoleucas)," "minnow;" cf. minnow

[24]This term may possibly refer to kokanee (reproducing lake resident individuals of O. nerka) or "residual sockeye," i.e. nonmigratory sockeye salmon that originate among anadromous populations but mature in fresh water, do not reproduce, and are smaller at maturity than regular sockeye salmon (Scott and Crossman 1973).

[25]A "jack" salmon is a sockeye that matures earlier than other sockeye, at three years of age (Carl, Clemens and Lindsey 1967).

[26]The golden shiner is native to eastern Canada but occurs elsewhere only as an introduction or as a bait fish (Scott and Crossman 1973) in which case this species may be referred to as a "minnow."

(66) ?Ptychocheilus oregonensis (Northern Squawfish)				hloox	BA lhok, 'fish' (P&Tn.d.); CA lhukw, 'fish (in general)' (J&Jn.d.)	G: "squawfish;" root 'feed'? with plural reduplication
(67) ?Hypomesus pretiosus (Surf Smelt)			‡kimaluwin (M74)		cf. HA k̓m̥àn̓i and HA k̓imàn̓i, unidentified fish;[27] KW k·!ɛ´mnēᵋ, "herring" (B47); NU k'mani, 'smelt (fish)' (N90)	G: "smelt Hypomesus pretiosus" (M74); prefix is reminiscent of G gimilak, "small coho"
(68a) Thaleichthys pacificus (Eulachon)	'ẅa̱h [ʔ¨ʌh]	'ẅa/'ẅah				CT: "candlefish," "olachen," "(whitebait) smelt"[28]; N, G equivalent *ʔu survives in words meaning 'to process eulachon grease,' N si'u and G sa'uyasxw (BR); prefix si- or sa-, 'to make, process'
(68b) Thaleichthys pacificus			saak	saak	TL sa·k, 'eulachon' (JL)	N: "oolichan," G: "olachen, candlefish" (Tlingit borrowing)
(69) Gadus macrocephalus (Pacific Cod or Gray Cod) and/or †Microgadus proximus (Pacific Tomcod)	ḵ'a̱wts [qʔɑwcʰ]					CT: "grey cod," "tommy cod (Microgadus proximus);" CT <'chin, labret' (likely refers to chin barbels);[29] also see gray cod
(70) ?Anarhichthys ocellatus (Wolf-eel), or perhaps ?Lampetra spp.	gyibawmts'm̱'aks [gʸibáwmcʔm̥ʔáks]					CT: "wolf eel; wolf fish (not Anarchichas lupus, but a local common name for the eel)," lit., 'wolf of in water'[30]
(71a) ?Sebastes melanops (Black Rockfish, "Black Bass," or "Sea Bass")	g̱aax, g̱áax					CT: "black bass," "Pacific sea bass;" cf. raven
(71b) ?Sebastes melanops	g̱aag̱m̱ ts'm̱'aks (BR)					CT: "black bass, raven of the sea;" (lit., 'raven of in water'); cf. raven
(72a) ?Sebastes ruberrimus (Yelloweye Rockfish, "Red Snapper")[31] and/or other Sebastes spp. ("Red Cods")	ts'm̱hon, ts'mhoon		ts'imhoon, simhoon			CT: both ts'ikts'imhoon and ḵ'a̱wts glossed as "grey cod;" CT: "red snapper" (PPS83); CT, N terms contain term meaning "fish (in general?);" N <CT; CT, N terms may contain prefix meaning 'real, best'?
(72b) ?S. ruberrimus and/or other Sebastes spp.		niitsa			(perhaps a borrowing of unknown origin)	ST: "red cod"
(73) ?Anoplopoma fimbria (Sablefish, Alaska Blackcod, Blackcod)	hadani [hadaní]	hadanii	hadanii		HA hadàni, HE hádání, OO/KW hadani, 'blackcod' (L&R80)	CT, ST: "black cod;" N: "Pacific cod Gadus macrocephalus" (M4); borrowed from Wakashan?
(74) ?Hexagrammos decagrammus (Kelp Greenling) and/or ?H. stelleri (Whitespotted Greenling) and perhaps others	ha'noo [haʔnɔ́·]					CT: "kelp cod"
(75) ?Ophiodon elongatus (Lingcod)	wa̱'tuk [wɑ́ʔtʾukʰ]					CT: "ling cod;" this word is very similar to N wát'ukw, 'female slave' (borrowing?)

[27] This species has been identified as "young herring" by Lincoln and Rath (1986) but Henaaksiala elder Gordon Robertson (pers. comm. 1994) has stated that it is another type of fish that has not yet been identified in zoological terms.

[28] The zoological identity of "(whitebait) smelt" is unclear. Dunn (1978) also gives the Coast Tsimshian term haalm̱moot [hà·lm̥mɔ́·tʰ] for eulachon, translated as "the Saviour, Jesus Christ" (possibly a missionary contribution).

[29] Barbels—slender hairlike projections—are present on the chin of Pacific, or grey cod, and the smaller, introduced Pacific tomcod.

[30] If this term does, indeed, refer to "eel" (i.e., one or more Lampetra spp.), then no record exists for any Tsimshianic term for the wolf-eel (Anarhichthys ocellatus—Anarchichas lupus is an obsolete binomial for this species). It would seem possible that this term does actually refer to wolf-eel although this requires verification. It is worth noting here that among the Haisla and Henaaksiala the wolf-eel and Pacific lamprey are associated in nomenclatural and perceptual terms—wolf-eel (c̓m̥g̃ʷis) is regarded as a large c̓m̥q̓àudi, or Pacific lamprey (Compton 1993b).

[31] Sebastes ruberrimus is commonly known in British Columbia as "red snapper" although the true red snapper (Lutjanus campechanus) occurs in waters off the east coast of North America and Mexico.

(76) ?Myoxocephalus polyacanthocephalus (Great Sculpin, "Bullhead") and other "Bullheads" (Cottidae and Scorpaenidae)	k'ayeet, kayeyt		ḿask'ayaaẏt	mask'ayaaẏ		CT: "bullhead," "cabezon," "sculpin," "sea raven" and "mudder";[32] N, G: "bullhead;" N, G ḿas- ?; also see starry flounder
(77) "Flounder," i.e., probably various species of Bothidae (Lefteye Flounders) and/or Pleuronectidae (Righteye Flounders)	dgxs [dɑxs]	daxs	daks			CT, G: "flounder;" N: "flounder Platichthys sp." (M74); also see Platichthys stellatus
(78) Hippoglossus stenolepis (Pacific Halibut)	txaw [tx̣aw]	txaxw	txox	txox		CT, ST, N, G: "halibut"
(79) ?Platichthys stellatus (Starry Flounder)	kbidgxs [kʰbidáxs], xbidgxs [x̣bídɑxs]					CT: "starry flounder;" lit., 'half flounder' (also see flounder)
(80a) ?Atheresthes stomias (Arrowtooth Flounder, Bastard Halibut) and/or ?Merluccius productus (Pacific Hake)	balaas [balá·s]				(possibly a borrowing of unknown origin)	CT: "haddles," "hakes," "bastard halibut;"[33] also see bat
(80b) ?A. stomias and/or ?M. productus	hadł [hádɬ]				(possibly a borrowing of unknown origin)	CT: "bastard halibut"
Unidentified Fishes						
(81) Unidentified Shark, reportedly "Nurse Shark" (but more likely refers to 'shark [in general]')[34]	sgaa [sga·]					CT: "nurse shark"
(82) Unidentified "Small Trout-like Lake Fish"				xts'iigwit (BR)		G: "a small trout-like lake fish, not eaten"
(83) Unidentified "Minnow" (probably various species of small unidentified native and introduced fishes, especially members of Cyprinidae)	xgdziks [x̣ɑ́ʒɪks]			x̣o·t'xs (R86)		CT: "minnows;" G: "minnow"
(84) Unidentified "Grey Snapper"[35]	k'ayadzen [kʔàyaʒén]					CT: "grey snapper" (cf. bullhead); *dzen, 'fog, cloud'? (reformation on borrowing?)
Part 7 - Class Amphibia (Amphibians: Salamanders, Newts, Toads and Frogs)						
(85) Ambystoma gracile (Northwestern Salamander), A. macrodactylum (Long-toed Salamander) and/or Taricha granulosa (Rough-skinned Newt)	ksiił, ksiiłk, ksił	ksiihl	ksihlkw	xsihlxw		CT: "lizard," "newt," "salamander;" ST, N, G: "lizard;"[36] also see ermine
(86) Bufo boreas (Western Toad) and possibly also Rana pretiosa (Spotted Frog) and/or Rana sylvatica (Wood Frog)	ganaw [gɑnáw], ganaw [gɑnáw]	gana'w	ganaaẇ	ganaaẇ		CT: "frog," "toad;" ST, N, G: "frog"
Part 8 - Class Reptilia (Reptiles: Turtles, Snakes and Lizards)						

[32]Dunn (1978) further specified that this term does not refer to Ictalarus spp. (i.e., catfishes, which do not occur naturally in British Columbia and are sometimes referred to as bullheads), but rather to "Hemitripterus americanus," "Myoxocephalus octodecemspinosus," "Scorpaenichthys marmoratus," and "Cottus bairdi." These fish may actually be Hemitripterus bolini (bigmouth sculpin), Myoxocephalus polyacanthocephalus (great sculpin), an undescribed species identified tentatively as M. scorpius (shorthorn sculpin) and Scorpaenichthys marmoratus (cabezon). These marine fish occur where they are likely to be encountered by various Tsimshianic peoples (Hart 1973; Peden 1990b; Scott and Crossman 1973) and could also be referents of Tsimshianic "bullhead" terms. Cottus bairdi (mottled sculpin) is a freshwater species found in British Columbia (Peden 1990a) but the known distribution of mottled sculpin as a freshwater fish of the Columbia River drainage in British Columbia and southward precludes the possibility that it is a referent of any Tsimshianic "bullhead" term. Coastrange sculpin (C. aleuticus) and prickly sculpin (C. asper) are found within the Coast Tsimshian territory, however, and represent likely referents for one or more Tsimshianic "bullhead" terms.

[33]The term "haddles" is not an English language name for either A. stomias or M. productus and likely derives from the second Coast Tsimshian term reported by Dunn (1978) for "bastard halibut" (which may be a borrowing itself).

[34]Nurse shark (Ginglymostoma cirratum) does not occur within British Columbian waters but seven other shark species do. The 'shark' term reported here by Dunn likely refers to one or more of those native species.

[35]No British Columbian fish is referred to among ichthyologists as "grey snapper" (cf., e.g., Carl, Clemens and Lindsey 1967; Hart 1973; Lamb and Edgell 1986; Scott and Crossman 1973). The only English fish name for a British Columbian species that is similar to "grey snapper" is green snapper, a name incorrectly applied to Sebastes flavidus (yellowtail rockfish) (Lamb and Edgell 1986).

[36]Although these terms are routinely glossed as "lizard," no true lizards (Class Reptilia) reside within the Tsimshianic territories.

(87a) Thamnophis sirtalis (Common Garter Snake) and possibly also T. elegans (Western Garter Snake)	laalt [la·lt^h], lə́alt [la·ʌlt^h]	laalt	lalt	lalt		CT, ST, N, G: "snake," also "worm" (cf. caterpillar)
(87b) Thamnophis spp.	matxalaalt [matxalə́·lt^h], metxalaalt [mɛtxɑlə́·lt^h]					CT: "snake;" cf. N "caterpillar"
Part 9 - Class Aves (Birds)						
(88a) Bird (in general)	ts'uu'ts, ts'úu'ts, ts'u'u'ts	ts'u'u'ts	ts'uuts'	ts'uuts'	cf. TL ts'utsk, "Anas histrionica [Histrionicus histrionicus, harlequin duck];" TL ts'uts, "diver"[37] (B91); TL s'ó́s', 'harlequin duck' (N&S63); TL ts'ítskw, "any small songbird" (N&S63)	CT, ST, N, G: "bird"
(88b) Bird (in general)	ts'u'u'tsm̓húup]					CT: "night birds;" lit., 'bird(s) of evening[38]
(88c) Bird (in general)	ts'u'u'tsm̓'aatk, tsu'u'tsm̓'áatk					CT: "night birds;" lit., 'bird(s) of night;'[39]
(88d) Bird (in general)	xbóolgn [xbóʌlgn]					CT: "night birds"[40] (*xbóol-, 'folded'?)
(88e) Bird (in general)	líbaayk (B91)					CT: "bird, all flying animals," 'to fly (plural);' may also denote bats and flying squirrel
(89a) Gavia adamsii (Yellow-billed Loon), G. immer (Common Loon), G. pacifica (Pacific Loon) and/or G. stellata (Red-throated Loon)	gool [gó·l]		gool	gol		CT, N, G: "loon"
(89b) ?G. immer (Common Loon)	amt'a (H93a)					CT: "Gavia immer (common loon)" (H93a), lit., 'at lake' (descriptive)
(90) Aechmophorus occidentalis (Western Grebe) and/or Synthliboramphus antiquus (Ancient Murrelet)	ts'msmhóon [c?msmhóʌn]					CT: "grey diving bird" (D78); "Aechmophorus occidentalis (western grebe)," "Synthliboramphus antiquus (murrelet)" (H93a); lit., 'in-real-fish'? (also see grey cod)
(91) Phalacrocorax auritus (Double-crested Cormorant), P. penicillatus (Brandt's Cormorant) and/or P. pelagicus (Pelagic Cormorant)	hawts, hawdz, haw'ts, ha'u'ts		haawts'		HA ha.uc̓, 'cormorant'	CT: "sea loon," "(black) cormorant," "bottle-neck duck," "cormorant;" "shags," "cormorant" (B02);[41] (also see harlequin duck)
(92) ?Ardea herodias (Great Blue Heron)	gasgoos [gɑsgó·s] ("stork"); k'askoox, k'askoos [q?ɑsq^{h}ɔ́·x], [q?ɑsq^{h}ó·s], k'awsk'oos [k?ɑwsk?ɔ́·s] ("[sandhill] crane [Grus canadensis]")	k'ask'oos	k'ask'oos			CT: "stork;" "(sandhill) crane (Grus canadensis);" ST: "heron;" N: "heron"

[37] "Diver" is term that has been applied in general to refer to members of Family Podicipedidae (grebes) (cf. Taverner 1929) although it is possible that this term may also be applied by some individuals to refer to other diving birds such as murrelets.

[38] Dunn (1978) glosses this term as "a general class which includes bats, owls, night hawks, and chicken hawks."

[39] Dunn (1978) glosses this term as "night hawk; mosquito hawk; bull bat." It seems to represent a synonym of the term given above. Note that no North American bat is known by the common name "bull bat," however one Central and South American bat (Noctilio leporinus) is known as bulldog bat (Boitani and Bartoli 1983).

[40] The referents of this term—apparently a synonym of the terms given above—are said to include "bats, owls, chicken hawks, and night hawks" (Dunn 1978).

[41] "Shag" is a colloquial term applied to one or more cormorant species in Europe (cf. Gore 1976) and, by extension, in British Columbia (cf. Olson 1940) while "sea loon" and "bottle-neck duck" seem to be local colloquial terms for cormorants.

(93) Duck (in general)			simnaxnaax		HA nàas:naq, HE ns:náq and HE nis:náq, OO niʔs:naaq, 'mallard' (L&R80); NU naxnx, 'mallard duck' (N90)	N: "mallard, duck (in general)," lit., 'real/best mallard' (also see mallard);[42] cf. ST amgiik
(94a) ?Aix sponsa (Wood Duck)			‡digit (M74)			N: "wood duck Aix sponsa" (homophonous with 'smoked eulachon')
(94b) ?Aix sponsa			digidimsaa			N: "wood duck;" cf. gitginsaa
(95) ?Anas crecca (Green-winged Teal), and/or Bucephala clangula (Common Goldeneye, "Whistler," or "Whistlewing"), and/or B. islandica (Barrow's Goldeneye) and/or Aix sponsa (Wood Duck)	ts'as [cʔas]		‡ts'aas (M74)			CT: "golden eyed sea duck," "whistler," "tree duck," "wood duck" (D78); "Bucephala clangula (common golden eye)" (H93a); N: "green-winged teal Anas carolinensis"
(96) Anas platyrhynchos (Mallard)	'na'na [ʔnaʔná], 'na'naat [ʔnaʔná·tʰ]		naxnaax	naxnaaxt	HA nàas:naq, HE ns:náq and HE nis:náq, OO niʔs:naaq, 'mallard' (L&R80); NU naxnx, 'mallard duck' (N90); cf. HA ʔʔṇaq, 'duck (in general);' NU a7nna, NU a7mma, 'hooded merganser' (N90)	CT, N, G: "mallard;" cf. N duck (in general)
(97) ?Branta bernicla (Brant) and/or ?Branta canadensis minima (Cackling Canada Goose)	łi'awin [łíʔʌwɩn]		hliwin			CT: "brant;" N: "laughing-geese" (B02); (cf. N gewin, "gull")
(98) Branta canadensis (Canada Goose) and possibly also Chen caerulescens (Snow Goose)	ha'a, haa'k, ha'ax, ha'k, ha'x	hax/ha'x	hak	hak	cf. HA hṇǧàq, '(any) goose;' HE haṇx̌-haṅǧis, 'brant goose' (R81); NU xa-x̄aq̇ (N77); possibly all these terms onomatopoeic	CT: "(Canada) goose;" ST, N, G: "goose"
(99) ?Bucephala albeola (Bufflehead)	waal'k					CT: "bufflehead"
(100a) Cygnus buccinator (Trumpeter Swan)	gaak		gakw	gakw (BR)	cf. HA/KW ǧǧuqʷ, HE qʷǧúqʷ, OO qʷǧʷuqʷ, OO qʷǧʷaus, '[trumpeter] swan' (L&R80); NU quuxuux, 'swan' (N90); TL gókl', 'whistling swan'[43] (N&S63); TL guqʷɬ, 'swan' (EJL); possibly all these terms onomatopoeic	CT, N, G: "swan"
(100b) C. buccinator				dilgoga		G: "swan"
(101) ?Histrionicus histrionicus (Harlequin Duck)	k'agaa				HD qā´qa, 'duck' (B91)	CT: "(Harlequin) duck (Histrionicus histrionicus)" (D78); "cormorant" (B91, B12) (also see cormorant)

[42] To the Nisga'a, the mallard would seem to represent the prototypical 'duck.'

[43] Olor columbianus (whistling swan) is a bird of the Arctic and does not occur within British Columbia (Udvardy 1977).

(102) ?Melanitta fusca (White-winged Scoter) and/or ?M. nigra (Black Scoter) and/or ?M. perspicillata (Surf Scoter); also ?Anas acuta (Northern Pintail) and ?Mergus sp. (Merganser)	amgyíik	amgiik	amgeek	amgiik (BR)		CT: "black duck," "surf scoter," "white-winged scoter," "Melanitta deglandi [syn. M. fusca]," "M. perspicillata;" ST: 'duck (in general),"sea ducks" (cf. N term for 'duck [in general]'); N: "merganser Mergus sp." (M74); "pintail duck" (NPD); am, 'good for' or 'at' (geek, ?); (also see simgeek)
(103) ?Melanitta sp. (Scoter)			(sim) ts'uuts'im laẋ mo'on (B02)			N: "scoter," lit., 'bird of sea;' "blackbirds of the sea" (B02), lit., 'real/best bird of/on sea;' "sea ducks" (R86)
(104a) ?Lophodytes cucullatus (Hooded Merganser) and/or Mergus merganser (Common Merganser) and/or M. serrator (Red-breasted Merganser)	míik			mukw		CT: "sawbill;" "brown-headed duck" (B16);[44] "Mergus serrator (red-breasted merganser)" (H93a); also means 'ripe,' 'rain cloud,' 'storm cloud;' cf. N mukw, 'ripe' (not 'merganser'); G: "sawbill"[45]; cf. following terms
(104b) ?Lophodytes sp., etc.	łgümiik		hlgimukw			CT: "sawbill duck," "hooded merganser," "red breasted merganser;" N: "baby ducks" (R86); cf. preceding terms
(104c) ?Lophodytes sp., etc.			amgeegim Lisims			N: "sawbills of Nass River" or "ducks of Nass River" (B02); cf. N amgeek
(105a) ?Accipiter gentilis (Northern Goshawk) and/or A. striatus (Sharp-shinned Hawk) and/or Buteo jamaicensis (Red-tailed Hawk) and/or Circus cyaneus (Northern Harrier)	xsu'usk [xsú?usk], xts'u'u'ts [xc?ú?u?c']					CT: "hawk;" first form may be simplification of term reported by B12 (see following term) while second form is reformation, lit., 'eat bird;' cf. bird (in general)
(105b) ?Accipiter sp., etc.	xts'u'utsk (B12)					CT: "hawk;" probably xs-ts'u'u'ts-k, 'imitate bird' (also see preceding terms)
(105c) ?Accipiter sp., etc.			ts'ik	ts'ik (BR)		N: "hawk"
(106) ?Aquila chrysaetos (Golden Eagle)	sgyamsim (B12)		sgimsim	skimsim		CT: "a bird;" N: cf. with Txeemsim (Raven); cf. sparrow hawk; G: "thunderbird" (T-Wn.d.); (also see thunderbird)
(107) ?Buteo jamaicensis (Red-tailed Hawk)				(mis)m̓oot'ixs (BR)		G: "chickenhawk;" "red-tailed hawk" (T-Wn.d.) (see barn owl); CT: see night birds terms; cf. grasshopper
(108) Haliaeetus leucocephalus (Bald Eagle)	xsgyiik, xsgyíik	xsgiik	xsgaak [xsgʸa·k]	xsgaak [xsgʸa·k]		CT, ST, N, G: "eagle;" cf. chickadee, crow
(109) ?Falco sparverius (American Kestrel, "Sparrow Hawk"), or possibly F. columbarius (Merlin) and/or F. peregrinus (Peregrine Falcon) and or F. rusticolus (Gyrfalcon)	sgyaamsm [sgʸá·msm] (D78); xsgyaamsim (B12)				HD skyā́mskun, 'sparrow hawk' (B91) (a Tsimshian borrowing)	CT: "hawk," "sparrow hawk" (lit., 'eating golden eagle'?, x-, 'eat,' or xs-, 'be/do like'?)

[44] The females of all the species listed in column one have brown heads.

[45] "Sawbill" is another common name for merganser.

(110) ?Bonasa umbellus (Ruffed Grouse, "Partridge") and/or ?Lagopus lagopus (Willow Ptarmigan)	maxmée [mʌxmé·ʌ], maxmeex [mɑxmé·x]			maxmeek	cf. HA (Gl.) mxła, HA (Gm.) mxłaa, 'ruffed grouse; to drum;' HE mḿkɬs, OO mḿkɬs, 'grouse' (L&R80); NU mucwmukwt, "bluegrouse" (N90)	CT: "grouse," "partridge," "pheasant"[46] (D78); Lagopus lagopus (willow ptarmigan)" (H93a); G: "blue grouse;" may be reduplicated forms based on the North Wakashan root ma-
(111) ?Dendragapus canadensis (Spruce Grouse)				lo'obim t'im ges, lo'oba ts'éî		G: "fool hen," lit. 'stone of head,' 'stone of face
(112) ?Dendragapus canadensis (Spruce Grouse), D. obscurus (Blue Grouse) and/or Lagopus lagopus (Willow Ptarmigan) and/or L. leucurus (White-tailed Ptarmigan) and/or L. mutus (Rock Ptarmigan)	liitsk		litskw	liitsxw		CT: "mountain grouse," "spruce grouse" (D78); "Dendragapus canadensis (spruce grouse), D. obscurus (blue grouse) and Bonasa umbellus (ruffed grouse)" (H93a); N: "blue grouse Dendragapus obscurus" (M74); G: "blue grouse;" root N *liits <hit (pl.)?
(113a) †Gallus gallus (Chicken)			ts'uuts'im k'amksiiwaa			N: "chicken," lit., 'white man's bird'
(113b) †G. gallus				tsigins		G: <English "chickens"
(113c) †G. gallus			sgadagóîskw			N: "baby chicks," lit. 'to lead (others) in the way'
(114a) ?Lagopus lagopus (Willow Ptarmigan), or other Lagopus spp.			psdaǧ	bisdaǧ		N: "ruffed grouse Bonansa umbellus" (M74), "willow grouse" (R86), "blue grouse;" G: "willow grouse"
(114b) ?Lagopus spp.			‡ayaǧ (M74), a'ya'y (R86)	ay'aaǧ		N: "ptarmigan Lagopus sp." (M74), "ptarmigan" (R86); possibly ay'aǧ or ay'aaǧ; G: "ptarmigan"
(115) ?Grus canadensis (Sandhill Crane)	gadaalx (H93a)		gadalk (B02)	gadalk	cf. HD (K) dɛl, "crane, and Gallinage Wilssoni" (said to be (borrowed from Tlingit by B91)	CT: "Grus canadensis (sandhill crane);" also see great blue heron
(116) Haematopus bachmani Audubon (Black Oystercatcher)	gyedmɬ (D78); gyedmxl (H93a)				‡HA gadmɬ, 'black oystercatcher' (a Tsimshian borrowing)	CT: "(Western black) oyster catcher," "oyster cutter;" root possibly CT gyet, 'person'?
(117) Actitus macularia (Spotted Sandpiper) and/or ?Gallinago gallinago (Common Snipe) and/or others	ts'iiɬ [c?i·ɬ]	ts'iihl		ts'iihl		CT: "(common) snipe; sandpiper" (D78); "Actitis macularia (spotted sandpiper), Gallinago gallinago (common snipe)" (H93a); ST: "(small) sandpiper);" G: "snowbird;" "snowbird," "snowbunting" (R86); also see Grus canadensis and Plectrophenax nivalis
(118a) Larus canus (Mew Gull), L. hyperboreus (Glaucous Gull), L. philadelphia (Bonaparte's Gull) and/or L. thayeri (Thayer's Gull)	gagoom [gagó·m], gaguum [gagú·m]	gaguum				CT, ST: "sea gull;" CT: "Larus hyperboreus (glaucous gull), L. canus (mew gull)" (H93a); N: "Little Gull" (a name borrowed from CT)
(118b) Larus spp.	‡lax anaay (H93a)					CT: "Larus philadelphia, Bonaparte's Gull," lit., 'on bread'? (term seems suggestive of TL ƛaxane·ś, 'kingfisher' (JL)
(118c) Larus spp.				gaga'at (BR)		N: (gull?); G: "gull sp.;" cf. Kisgegas (place name): <Git-sk'a-ga'at-s?
(118d) Larus spp.			gewin [qíwin]	qe·win (R86)	cf. Hco q̓ʷaní, No q̓ʷini, 'gull' (N74)	N: "gull;" G: "gull sp." (cf. laughing goose)

[46] Phasianus colchicus (ring-necked pheasant) is not distributed within the Tsimshianic territories.

(119) ?Cerorhinca monocerata (Rhinoceros Auklet) and/or ?Melanitta sp. (Scoter)	ahoo [ʔahó·]					CT: "common scoter" (D78); "Cerorhinca monocerata (rhinocerous auklet)" (H93a)
(120) ?Columba fasciata (Band-tailed Pigeon) and/or †C. livia (Rock Dove)	hamham		gamim [gʸamím]		CH qamɛn, 'pigeon' (B04); HA ḣaḣa:hm̩̀, 'band-tailed pigeon;' HE ḣáḣ̩, HE haḿḿ, 'pigeon' (R81); KW hă´ᵋmo´, 'pigeon (Columba fasciata)' (B47); NU haʔm, 'pigeon' (N77)	CT: "pigeon;" N: "dove"
(121) Owl (in general), e.g., Asio flammeus (Short-eared Owl), Aegolius acadicus (Northern Saw-whet Owl), Bubo virginianus (Great Horned Owl) and/or Strix nebulosa (Great Gray Owl) and/or S. varia (Barred Owl) and others (see below)[47]	gwitgwiníiks [gʷɩtgʷɩní·ʌks]	k'utk'uniiks/k'utk'uniiwks	k'utk'unukws, kw'itkw'inukws	k'utk'unuxs	HD (K) gutgunē´st, 'Bubo Virginianus [Bubo virginianus, great horned owl]' (B91); OO gʷn̩ígʷn̩i, 'owl' (B47); cf. HA dxdxn̩ì, 'owl' (L&R80); KW dxdxliɬ and KW dxdxluɬ, 'owl' (L&R80)	CT, ST, N, G: "owl;" lit., 'all around-looks'?; CT: "owl," "Bubo virginianus (great horned owl)," "Aegolius acadicus (northern saw-whet owl)," "Asio flammeus (short-eared owl)" (H93a); N: k'utk'u, 'all around' (may mean 'looks all around' in all Tsimshianic languages although VN denies this for ST)
(122a) ?Aegolius acadicus (Northern Saw-whet Owl) and/or Glaucidium gnoma (Northern Pygmy-owl)			huuxw	huxw (RW)	TL k̲'úkw, "owl without ear tufts" (N&S63); HD k'akw, 'owl' (L77)	N: "saw-whet owl" (small owl, said to bring good luck to hunter if heard); G: unidentified bird, heard at night, sounds like bell, brings good luck if heard
(122b) ?A. acadicus and/or G. gnoma				ḿoot'ixs (R86)		G: "barn owl," see red-tailed hawk[48]
(123) ?Otus kennicottii (Western Screech-owl)			x̲bilg̲antkw			N: "screech owl" (brings bad luck if seen), N x̲bilg̲ - cf. CT x̲bóolg̲n, G hisx̲bilxsit
(124) Nyctea scandiaca (Snowy Owl)	‡poog (H93a)					CT: "Nyctea scandiaca (snowy owl)"
(125) Chordeiles minor (Common Nighthawk)[49]				majilye		G: "nighthawk," cf. maji with N "moth"
(126a) Selasphorus rufus (Rufous Hummingbird)	ałdig̲aws [ʔàłdig̣áws]					CT: "hummingbird" and "woodpecker;" lit., 'no hair'
(126b) S. rufus	‡kalgmgaws (H93a)					CT: "Selasphorus rufus (rufous hummingbird)"
(126c) S. rufus			x̲g̲esit			N: "hummingbird," lit., 'eat hair'
(126d) S. rufus				jin (T-Wn.d.)		G: "rufous humming bird;" a borrowing?
(127) Ceryle alcyon (Belted Kingfisher)	ts'iyoolky, ts'iyoolk, ts'ioolk		ts'iyoolik'	ts'iyoolik' (T-Wn.d.)		CT, N: "kingfisher" (CT: also "bullroar[er]"); G: "belted kingfisher" (possibly reformations on borrowing from unknown source?)
(128) ?Colaptes auratus (Northern Flicker)	gyiłweentk		gihlẇinskw, gihlẇintkw	gihlẇintsxw		CT, N: "woodpecker;" G: "red-shafted flicker (woodpecker)" (T-Wn.d.); gihl- <gahl [gyaɬ] 'pierce(d)'
(129) ?Sphyrapicus ruber (Red-breasted Sapsucker)			haa'atkw	haa'atxw		N: "woodpecker;" "small red-headed woodpecker" (R86); G: "redheaded woodpecker" (H&R73); "yellow bellied sapsucker (red phase)" (T-Wn.d.)[50]

[47] Also see the Coast Tsimshian terms for 'night birds,' said to include owls among their referents.

[48] Rigsby (1986) has reported that (Gitksan) ḿoot'ixs and (Nisg̲a'a) ts'ik "are all said to be the same" and refer to "hawk."

[49] Also see Coast Tsimshian terms for 'night birds,' said to include "night hawks" among their referents.

[50] No Coast Tsimshian name for this bird has been recorded but Boas (1916) reported that Coast Tsimshian "hau, hau" was the "cry of woodpecker," and Nisg̲a'a "haau hâ" is the sound of the haa'atkw (Boas 1902).

(130) Unidentified Woodpecker, possibly Dryocopus pileatus (Pileated Woodpecker)	smgyiik					CT: "woodpecker" (D78), "spruce pecker" (B91); (cf. mosquito), possibly, lit., 'real/best pecker'?[51]
(131) Picoides villosus (Hairy Woodpecker) and possibly also Picoides tridactylus (Three-toed Woodpecker)	go'osgan [g̣ɔ̀ʔɔsg̣án]	goo'osk [qó·ʔɔsk]				CT, ST: "woodpecker;" CT: "Picoides villosus (hairy woodpecker)" (H93a); CT: term includes gan, 'tree, wood;' ST: root gok (refers to the pecking action) + antipassive suffix suggests repetitiveness
(132) Unidentified "Small Woodpecker," possibly ?Picoides pubescens (Downy Woodpecker)			gitginsaa			N: (name derived from its cry), a "small woodpecker"? (accompanies Txeemsim in his flight to heaven—represented as small woodpecker on totem pole)[52]
(133a) ?Hirundo rustica (Barn Swallow) and/or Tachycineta bicolor (Tree Swallow) and/or T. thalassina (Violet-green Swallow)	sɛpɛxī´°m aks (B12)					CT: "swallow" (D78); "Hirundo rustica (barn swallow)" (H93a); lit., 'something that makes the tide rise'
(133b) ?Hirundo sp., etc.			hasyayks	hasiyayks		N, G: "swallow;" root may be syax, 'scorched' (?)
(134) Corvus caurinus (Northwestern Crow)	k̲'awg̲aan (B91, B12) (probably k̲'awg̲aaw, k̲'awg̲aw)	k̲'awk̲'aaw	k̲'awk̲'aaw	g̲awk̲'aw	NU k'aqas, 'crow' (N90); HE k̓áqa, 'crow' (R81)	CT, ST, N, G: "crow;" Boas' transcription may be an error
(135) Corvus corax (Common Raven)	g̲aax [g̣a·x̣], [g̣ax̣]	g̲aax̲	g̲aak̲	g̲aak̲	HA k̓aax̌, 'northwestern crow (or the croak of northwestern crow)'; HA ǧax̌, "cry of northwestern crow or common raven;" NU qwaxw, 'raven' (N90)	CT, ST, N, G: "raven;" N, G: also means 'index finger;' terms onomatopoeic
(136a) Cyanocitta stelleri (Steller's Jay) and/or Perisoreus canadensis (Gray Jay, "Canada Jay," "Camprobber")#1	gwüsgwaask, gwüsgwaas	gwisgwaas	gwisgwoos	gwisgwoos		CT, ST, N: "blue jay:" G: "Canada jay, camprobber;" similar forms occur in many languages of Pacific Northwest Coast
(136b) C. stelleri				k̲'alidakhl		G: "bluejay" (H&R73), "Stellar's [sic] jay" (T-Wn.d.); cf. dakhl, 'ribbon, bow' or could be dak̲hl, 'hammer;' cf. Oregon junco
(137) ?Parus rufescens (Chestnut-backed Chickadee) and/or P. gambeli (Mountain Chickadee) and/or P. hudsonicus (Boreal Chickadee) and/or Regulus satrapa (Golden-crowned Kinglet)	skī°k (B16)		sk'iik'	sk'iik, sk'ik'		CT: "a bird;" N, G: "chickadee"
(138) ?Troglodytes aedon (House Wren)[53] and/or ?Troglodytes troglodytes (Winter Wren)	waaxs, weexs					CT: "(house) wren;" "Troglodytes aedon (house wren)" (H93a)

[51] Udvardy (1977) indicates that the northern extent of the range of the pileated woodpecker within British Columbia may be south of the Tsimshianic territories. However, Henaaksiala elder Gordon Robertson identified with certainty a specimen of this bird as the referent of HA ƛ̓ìx̌p̓iga (Compton 1993b). This would suggest the possibility that one or more Tsimshianic groups also were familiar with this bird. The presence of the 'real' prefix in the Coast Tsimshian "woodpecker" term might also be suggestive of this identifications given the physical distinctiveness of this woodpecker—it is the largest in the region with a prominent red crest—when compared with others in the area.

[52] No Coast Tsimshian name for this bird has been recorded but Boas (1916) did report that Coast Tsimshian "g·it, g·it, g·it g·insa-a-a-a´" was an unidentified "bird's cry" and that Nisg̲a'a "g·ît g·ît g·ît g·însăăăăă" was the sound of the gitginsaa (Boas 1902).

[53] This identification is somewhat suspect as the house wren is found only in southern British Columbia (Udvardy 1977). Perhaps house sparrow (Passer domesticus) or winter wren (Troglodytes troglodytes) is the actual referent.

(139) ?Catharus guttatus (Hermit Thrush) and/or ?Ixoreus naevius (Varied Thrush)	biin					CT: "thrush" (D78); "Ixoreus naevius (varied thrush)" (H93a); cf. beetle
(140) ?Catharus ustulatus (Swainson's Thrush)			(xsmiyootkwsit)[54]			N: "thrush," lit., the one that says miyoo' (probably the name of the story character rather than the name of a bird)
(141a) ?Turdus migratorius (American Robin)	gyilagyoo, gyilakyoo	gilagyo [gilagʸɔ́]				CT, ST: "robin"
(141b) ?T. migratorius				(gwi)sgangwa'ltxw (BR)		G: "robin" (root *gwal-?)
(141c) ?T. migratorius	so'ax [sɔ́ʔax], sóo'k		sook'	sook' (R86)	TL šu·x̌(ʷ), 'robin' (JL); BA sokh, 'robin' (P&Tn.d.); CA soh, 'robin' (CLC74); cf. HA cùqʷa, 'American robin'	CT: "robin;" N: "robin Turdus migratorius" (M74); G: "robin," root reportedly means oval-shaped, in reference to the robin's breast (R86); probably originally Tlingit
(142) ?Dumetella carolinensis (Gray Catbird)	hawulwulwulaay (B12)					CT: "mocking-bird;" (<wulaay, 'know something')[55]
(143a) ?Dendroica coronata (Yellow-rumped Warbler, including "Audubon's Warbler") and/or ?Zonotrichia atricapilla (Golden-crowned Sparrow)	maxlagalgaliis				(possibly derived from an unreported Wakashan form?)	CT: "Audobon's [sic] warbler" (D78); "Zonotrichia atricapilla (golden-crowned sparrow)" (H93a)
(143b) ?D. coronata	siibiban [si·bíbʌn]					CT: "Audobon's [sic] warbler" (a borrowing?)
(144) Junco hyemalis (Dark-eyed Junco)	daxlamol					CT: "Oregon junco;" also see G "bluejay/Stellar's [sic] jay;" cf. daxɬ 'hammer'
(145) ?Melospiza lincolnii (Lincoln's Sparrow) and/or Melospiza melodia (Song Sparrow) and/or Passer domesticus (House Sparrow) and/or Passerculus sandwichensis (Savannah Sparrow) and/or Passerina iliaca (Fox Sparrow) and/or Spizella passerina (Chipping Sparrow) and/or Zonotrichia atricapilla (Golden-crowned Sparrow)	güsgüüts, gyüsgüüts		gisgits'		cf. HA ǧʷìsǧʷɨ, HA ǧʷɨsǧʷì, 'pine siskin'	CT: "wren," "sparrow;" N: "sparrow"
(146) ?Melospiza melodia (Song Sparrow) or ?Dendroica petechia (Yellow Warbler)	smli'kask [sm̩íˑʔkˀɑskʰ]					CT: "song sparrow" (D78); "Dendroica petechia (yellow warbler)" (H93a); seems to be antipassive verb
(147a) ?Plectrophenax nivalis (Snow Bunting) and/or ?Junco hyemalis (Dark-eyed Junco)	X-mo'gut (B16), [xmɔgut]		xmugwit			CT: "name of a bird;" N: "snowbird, grey, with black bill, feeds on ripe crabapples in winter," 'the one which eats ripe ones'[56] (term is likey borrowed into Tsimshian from Nisgha; cf. term for 'thrush')
(147b) ?P. nivalis, etc.				ts'iihl		G: "snowbird;" "snowbird," "snowbunting" (R86) (This may be a misidentification as this term is also reported for 'sandpiper.')

[54]Boas (1902) glossed this term (x-smiyâ'tk"sîL) as "salmonberry-bird." This bird's call is recorded as Coast Tsimshian miyu gumik (Boas 1916) and Nisga'a miyâ', miyâ', this latter sound said to make a dish become filled with salmonberries (Rubus spectabilis) (Boas 1902). Among the Haisla and Henaaksiala it is believed that the Swainson's thrush sings and, as a result, salmonberries ripen (Compton 1993a).

[55]Several members of the Mimidae (mockingbirds, thrashers and allies) are referred to as "mockingbirds" for their imitative faculties (Taverner 1928). Four species of Mimidae are found within British Columbia but only the gray catbird is distributed within the vicinity of the Tsimshianic territories. The term reported by Boas (19120 may be derived from the cry of this bird.

[56]Pine siskin has been identified as the "snowbird" of the Secwépemc (Compton et al. 1993), and "chickadee" as the "snowbird" of the Tlingit (Naish and Story 1963), while snow bunting and dark-eyed junco could conceivably also represent types of "snowbirds." Note that the Coast Tsimshian term show here seems to be the Nisga'a form, which is the name for a story character.

(148a) ?Carduelis pinus (Pine Siskin)	ts!ɛpts!a´p (B12) [c'ɪpc'áp]; ts'ip ts'aap (H93a)		ts'iptsʼap			CT: "tomtit, wren";[57] N: "wren"
(148b) ?C. pinus				ts'it'uxsda	cf. TL tc'ɬt, "Brachyrhampus marmorata [Brachyramphus marmoratu, marbled murrelet]" (B91); TL čɬ·t, 'murrelet' (JL)	G: "wren"
Unidentified Birds						
(149) Unidentified Duck, ?Aythya valisineria (Canvasback)[58]			simgeek			N: "canvasback duck," sim, 'real/best' (geek, ?); also see N amgeek[59]
(150) Unidentified "Spotted Duck"	gagawee (B91, B12)					CT: "spotted duck"
(151) Unidentified "Duck"	an'aneex [ʔànʔané·x̱]				probably from HA ??n̰aq, 'duck (in general),' or a similar form	CT: "duck;" "a species of duck" (B12); neex could be same as naax in N. naxnaax; also see mallard
(152) Unidentified Bird, "Eating Gum"			(xsgant)			N: "eating gum (a bird)" (B02); sgan, 'gum, pitch;' this may be a name that only occurs in stories, rather than the name of a specific type of bird
(153) Unidentified Bird			(Ts'inkw'ats)			N: "name of bird" (B16), possibly name of a specific character rather than a type of bird; possibly a reformation, cf. kw'ats, 'excrement'
Part 10 - Class Mammalia (Mammals)						
(154) ?Sorex cinereus (Common Shrew, Masked Shrew) and/or S. monticolus (Dusky Shrew) and/or S. vagrans (Vagrant Shrew)	diboogit [dɪbó·gɪt^h]		diboogit	diboogit	cf. ‡HA qudibàud or possibly ‡HA g^{w}dibàud, 'water shrew'	CT: "shrew, "masked shrew," "pigmy shrew;" G: "mouse, shrew;" possibly reformation on Haisla/Henaaksiala term with dibàud interpreted as transitive verb form, hence -git, 'people,' added as object
(155) Sorex palustrus (Water Shrew)			gaakhlim ts'im aks			N: lit., 'mouse of in water'
(156a) Lasionycteris noctivagans (Silver-haired Bat) and/or Myotis lucifugus (Little Brown Myotis) and possibly others	gabalaas [g̰abɑlá·s]				HA ǧiǧìbala, 'red alder catkin'	CT: 'bat;' CT also "mosquito larvae;" also see night birds and bastard halibut terms
(156b) L. noctivagans, etc.	ts'ogat'axtxayɬ [c?ogɑt?ɑxtxáyɬ]					CT: "bat;" compound word, ts'ok ? + reduplicated form of txayɬ = 'attack'?; also see night birds terms
(156c) L. noctivagans, etc.			woxwok/waxwok	woxwok (BR)		N, G: "bat;" root seems to be wok, 'to sleep' (reduplicated plural form); also see night birds terms; cf. moth
(157a) Homo sapiens (Human)	gyet [g^{y}ɛt^h], gyit [g^{y}ɪt^h]		gat	gyat, gat		CT: "human being," "man," "person;" N: 'people, man;' G: "man"

[57] "Tomtit" is a name used imprecisely to designate either titmice (i.e., one or more species of Paridae, the titmouse family) or any one of various other active, small, brown birds. The only members of Paridae that occur within the Tsimshianic territories are chickadees (Parus spp.). Only one true wren—the winter wren—occurs naturally within the Tsimshianic territories but this is the most likely referent of the Coast Tsimshian "(house) wren" term reported by Dunn (1978).

[58] The known range of this species would suggest that it is not typically, if ever, found within the traditional Tsimshianic homelands (see Udvardy 1977).

[59] This term may perhaps refer to what is perceived as a best or ideal representatives of a specific type of bird while the term amgeek may label a less representative form of this type of bird.

(157b) H. sapiens			alungigat			N: 'Indians;' formerly 'people;' alun-, 'in the open, visibly,' gigat, reduplicated plural of gat; probably because humans always appear as humans and never in animal form
(157c) H. sapiens	amksiwah [ʔàmksɬáh]	k'am(k)siiwaa	k'amksiiwaa	(k')amksiwaa	possibly from TL ḱate-so-war [xe·ɬawá], 'ptarmigan,' <proto-Athabaskan, probably meaning 'pale shadow' (JL)	CT: "European;" ST, N, G: "white man"
(158) Monkey and/or Bigfoot[60]	ba'wis [báʔwɪs], ba'wüs [báwɨs]				HA/KW bx̌ʷs, "wild man of the woods, sasquatch;" HA bx̌ʷs.ṁṇix̌ʷ, "monkeys" (lexicalised diminutive of HA/KW bx̌ʷs)	CT: "monkey," "bigfoot;" also see Man of the Woods (likely borrowed from Wakashan)
(159a) Lepus americanus (Snowshoe Hare)	ga (B91, B12)		gax	gax	‡HA (Gl.) q̓ax̌, 'snowshoe hare;' NU qax, 'rabbit' (N90); CA goh, 'rabbit' (CLC74); TL gax, "rabbit" (JL)	CT, G: "rabbit;" N: "rabbit," "snowshoe hare" (borrowed from Tlingit)
(159b) L. americanus	stukwliin [stukʷlíːn], stükwlíin [stɨkʷlíʌn], stukliin [stuklíːn], stükwɬiin [stɨkʷʰɬíːn], stükwɬíin [stɨkʷʰɬíːʌn]	stipwkhliin				CT, ST: "rabbit;" *kwhliin, cf. N *kwhlii-, kwhlak; could be <Tlingit root or reformation on borrowing
(159c) L. americanus				maaxwsxum gax		G: "snowshoe rabbit;" lit., "white snowshoe hare"
(160) Ondatra zibethicus (Muskrat)	nak'eeda [nɑkʔéːdɑ], nak'eeda [nɑqʔéːdʌ]		naak'eeda	nak'eeda		CT, N, G: "muskrat"
(161a) Castor canadensis (Beaver)	sts'ool [scʔɔːl], sts'ól [scʔɔʌl]	sts'o'ol [sc̓ʔɔl]				CT, N: "beaver"
(161b) C. canadensis			ts'imilx	ts'imilix		N, G: "beaver;" probably from ts'im-*hlix (cf. gililx, 'up in woods,' from gil-*hilx)
(161c) C. canadensis			jaayaas	jaayaas(a) (BR)	‡HA cayauzi, 'baby beaver' (possibly from Athabaskan?)	N, G: "young beaver"
(162) ?Peromyscus maniculatus (Deer Mouse) and/or ?Microtus longicaudus (Long-tailed Vole) and possibly extended to the introduced species, †Mus musculus (House Mouse)	wits'iin [wɪcʔíːn], wüdzíin [wiʒíʌn̩], wüts'íin [wɨcʔíːʌn]	xwts'iin/xwits'iin			TL kuts'ɬ'n, "mouse, shrew" (B91); TL kuċi·n, "small field mice"[61] (JL)	CT, ST: "mouse" (Tlingit borrowing)

[60] Monkeys are not native to British Columbia, but this term likely refers to any member of Superfamily Ceboidea (New World monkeys), Superfamily Cercopithecoidea (Old World monkeys) and members (excluding human) of Superfamily Hominoidea (higher apes and human). "Bigfoot" is either a mythical entity or an entity of undetermined biological affiliation.

[61] Emmons (1991) described the creatures called kuċi·n and/or kagá·k (see the following entry) as "small field mice" that were known by the Tlingit to create numerous holes on mountain tops, enter houses and chew into grease boxes. According to editorial comments on Emmons' work provided by de Laguna, one or the other of these rodents is either a "mouse" or a "rat." Peromyscus maniculatus is the likely referent of kuċi·n; it is widely distributed throughout the region in question and commonly enters human habitations although M. longicaudus (cf. Cowan and Guiguet 1965) better fits Emmons' (op. cit.) description of a rodent of mountainous habitats. The description of TL kuċi·n as a "red-backed rat" (Emmons 1991) would seem to suggest its identification as Clethrionomys rutilus (northern red-backed vole) among the Tlingit, in which case the corresponding Tsimshianic forms could conceivable refer to C. gapperi (southern red-backed vole) (cf. Cowan and Guiguet 1965). Of course, the introduced house mouse (Mus musculus) is also known to be a destructive pest of human habitations to which the Tlingit and/or Tsimshianic "mouse" terms may have been extended to include in post-contact times. Note, however, that Naish and Story (1963) have glossed kuċi·n as "rat."

(163a) Neotoma cinerea (Bushy-tailed Woodrat, "Packrat") and/or Peromyscus maniculatus (Deer Mouse) and possibly extended to the introduced species †Rattus norvegicus (Norway Rat) and/or †Mus musculus (House Mouse)	gaakɬik, gagɬik [gágɬɪkʰ], gaklɨik [gáklɨ·kʰ]	gaakhlik	gaakhl	gaakhl	TL kagá·k, "rat"[62] (JL)	CT: "house mouse," "rat;" N: "mouse;" G: "rat" (H&R73), "mouse, rat" (T-Wn.d.); borrowing from Tlingit
(163b) ?N. cinerea			gaakhlim ts'im lo'op			N: lit., 'rat in rock'[63]
(163c) ?N. cinerea and/or ?†R. norvegicus				ẇii gaakhl		G: "packrat" (T-Wn.d.), lit., 'big mouse/rat'[64]
(164) Erethizon dorsatum (Porcupine)	awt, awta	axwt	axwt	axwt		CT, ST, N, G: "porcupine" (original meaning 'armed'?)
(165a) Glaucomys sabrinus (Northern Flying Squirrel)	dzaxagayt [ʒàxʌgáytʰ]					CT: "flying squirrel;" dxaxa-, 'across'
(165b) G. sabrinus	gyipaygmdesx [gʸɪpáygmdésx]					CT: "(Northern) flying squirrel (Glaucomys sabrinus);" could be translation of English "flying squirrel" (desx)
(165c) G. sabrinus			k'iphlik'	k'ip hlik'		N, G: "flying squirrel" (reformation on a borrowing? or back-formation from partial hlik' or ts'inhlik'?; k'ip-, 'little;' see also next entry)
(165d) G. sabrinus			k'ipdasq (Suttles in R86)			N: "flying squirrel" (recorded in Kincolith, area of Coast Tsimshian influence, seems to mix N and CT elements [k'iphlik'-dasx]; cf. previous entry
(165e) G. sabrinus			gibaygum ganaaẇ (R86)			N: lit., 'flying frog' (cf. CT gyipaygmdesx)
(166) Marmota caligata (Hoary Marmot)	gwík, gwiikw		gwiikw	gwiikw	HA kʷʼikʷʼxd, 'hoary marmot'	CT: "ground hog," "marmot," "woodchuck;" "marmot" (B91, B12); N, G: "marmot"
(167a) Marmota monax (Woodchuck)	gax [gɑx]					CT: "ground hog," "woodchuck;" cf. 'rabbit'
(167b) M. monax			juulukw [dʒú·lukʷ]	juulukw (BR)		N: "burrowing animal seen only in spring" (Suttles in R86); G: "lowland groundhog" (R86); "black woodchuck" (RW)
(167c) M. monax				qahlalkw		G: "woodchuck" (R86)
(168a) Tamiasciurus douglasii (Douglas' Squirrel, "Chickaree") and/or T. hudsonicus (Red Squirrel) and/or Tamias amoenus (Yellow-pine Chipmunk)	dasx, desx	dasx			HD da´sqa, 'squirrel' (B91); probably from an old Tsimshian form	CT: "chickaree," "chipmunk," "squirrel" (D78); "squirrel" (B91, B12, B16); ST: "squirrel;" cf. also flying squirrel
(168b) T. douglasii, etc.			ts'inhlik'	ts'in hlik'		N, G: "squirrel" (possibly reformation on borrowing of unknown origin?)
(168c) T. douglasii, etc.				cilqesa, cilqe·st (R86)		G: "chipmunk;" (origin unknown)

[62]The creature known to the Tlingit as kagá·k may be the "rat" mentioned by Emmons (1991) although this term is glossed elsewhere as "field mouse" (Naish and Story 1963). As with the Tlingit and Tsimshianic "mouse" terms, this term may have been extended in recent times to include the introduced species R. norvegicus.

[63]Nisga'a seems to lack a "mouse" term equivalent to CT wits'iin, ST xwts'iin and TL kuči·n. It seems probable that if gaakhl refers to a "mouse" (likely P. maniculatus) then gaakhlim ts'im lo'op probably refers to N. cinerea, a species with a habitat preference for broken rock and talus (Cowan and Guiguet 1965).

[64]In a manner comparable to the Nisga'a situation, in Gitksan the term gaakhl might denote "mice" (i.e., P. maniculata and M. musculus) while ẇii gaakhl might denote "rats" (i.e., N. cinerea and R. norvegicus).

(169) †Canis familiaris (Domestic Dog)	háas	os	us	os	may occur in NU osipax, "Variety of dog salmon found at Bella Bella." (M92)[65]	CT, ST, N, G: "dog;" cf. G "coyote;" CT form probably an old plural form (cf. Tarpent 1994b)
(170a) Canis latrans (Coyote)	gyibaaw, gyibaw, gyibaw					CT: "wolf;" "coyote" (by extension); cf. wolf
(170b) C. latrans			gandahlii, gandihlii			N: "coyote" (a borrowing of unknown origin?)
(170c) C. latrans				gwuliks woxkw		G: "coyote," lit., 'barker at himself' (also see grizzly bear)
(170d) C. latrans				osim sbaayt gan		G: "coyote," lit., "dog of among trees;" cf. dog
(171) Canis lupus (Gray Wolf)	gyibaaw, gyibaw, gyibaw	gibaaw	gibuu	gibuu		CT: "wolf;" "coyote" (by extension); ST, N, G: "wolf"
(172a) Vulpes vulpes (Red Fox)	nagats'ée, nagats'éet		nagats'e [nagaćé]		HA nǧćai, 'red fox;' HD naga´tsē, "fox (borrowed from Tlingit)" (B91); TL na·gaśé·, 'red fox' (JL)	CT: "red fox;" N: "fox;" borrowing from Tlingit, originally from proto-Athabaskan, probably meaning 'twisted eye' (JL)
(172b) V. vulpes				t'ak'aluts		G: "fox" (a borrowing?)
(172c) V. vulpes				k'ala ẇaa'a		G: "fox" (a borrowing?)
(173a) Felis concolor (Cougar, "Mountain Lion") and others?	duusm gyilhawli	duusim gilhaẅlx	duusim gililx	duusim gililix		CT: "bobcat," "cougar," "lynx," "mountain lion;" CT, ST, N: "cougar;" G: "mountain lion;" CT, N: lit., 'cat up on hill' (also see F. silvestris)
(173b) F. concolor and others?	hawhaw, hawhaw	hawhaw	hawáw [hawáw]	hawaw	HA hu:hù, "lion" (probably the origin of the Tsimshianic terms)	CT: "a fabulous monster, said to be similar to panther" (B12); an (African) lion" (D78); N: "mountain lion Felis concolor" (M74); G: "mountain lion:" N, G forms borrowed from CT
(173c) F. concolor and others?	nā´osō (B91) [ná·wsu]					CT: "mountain lion" (B91)[66]
(174) †Felis silvestris (Domestic Cat)	duus	duus	duus	duus	TL dú·š, 'cat' (JL); TL dūc, HD tō´us, "cat" (CJ) (B91)	CT, ST, N, G: "cat" (<CJ, <English "puss") (also see F. concolor)
(175) Lynx rufus (Bobcat) and/or L. canadensis (Lynx)			weex	weex	CA wasi, 'lynx' (CLC74); CA waṣ̌i, "(Kitkson [Gitksan] wic), lynx" (M32)	N, G: "lynx;" from Athabaskan (Carrier)
(176) †Panthera leo (Lion)	midíik, müdíik					CT: "grizzly bear," "(African) lion" (also see cougar and grizzly bear—this term refers to large, fierce animals and monsters)
(177) Enhydra lutris (Sea Otter)	płoon, płóon	plo'on/phlo'on	plo'on, phlo'on	phlo'on		CT: "sea otter (Enhydra lutris);" ST, N, G: "sea otter"
(178a) Gulo gulo (Wolverine)	nóosü, noosüü [nɔ́·sï·]		noosik'		(Interior) TL nú·skʷ, 'wolverine' (JL); TL nōsk, "badger"[67] (B91)	CT, N: "wolverine" (cf. caterpillar) (Tlingit borrowing?)

[65] This term may denote chum salmon that may differ from the type typically encountered by the Nuxalk in terms of the age at which they return to spawn, the location where they spawn, or perhaps to some type of natural hybrid with, for example, pink salmon (cf. Carl et al. 1967; Scott and Crossman 1973).

[66] This is apparently an erroneous gloss for the Coast Tsimshian term for wolverine (Gulo gulo).

[67] Badger (Taxidea taxus) is restricted to the southern interior of British Columbia (Nagorsen 1990), hence it is unlikely that this Tlingit term refers to this species. Rather, the term may actually refer to wolverine (cf. Naish and Story 1963, who gloss this term as 'wolverine').

(178b) G. gulo				naagets		G: "wolverine," also see red fox (This form is similar to 'red fox' in other Tsimshianic languages and all Tsimshianic forms may represent borrowings from an Athabaskan language from the same proto-Athabascan form.)
(179) Lontra canadensis (River Otter)	'watsa	ẇatsa	ẇatsx	ẇatsx	HA ẇaƈ, 'dog' (also in terms for coyote, wolverine, fisher and muskrat); NU wats', NU *wnts', 'dog' (N90); possibly borrowed from Tsimshian	CT: "land otter; river otter;" ST, N, G: "land otter;" cf. N miẇatsx, 'naughty, crazy'
(180a) Martes americana (Marten)	yeni [yéni]					CT: "marten," probably borrowing (cf. mink)
(180b) M. americana			hat'	hat'		N, G: "marten" (cf. N hit', 'to stick'?)
(181) Martes pennanti (Fisher)			ẇeen	ẇeen		N, G: "fisher;" N: homophonous with 'teeth;' G 'win, 'teeth' (a borrowing)
(182) Mephitis mephitis (Striped Skunk)	gaan, geen, geyn	geyn/geen	gen	gen		CT, ST, N, G: "skunk"
(183) Mustela erminea (Ermine, "Short-tailed Weasel")	maksiɬ, müksiɬ	miksiihl	miksihl [mɪksík]	miksihl, muxsihl		CT, ST, N, G: "weasel;" N: (seems to include the root ksihl of ksihlkw, 'salamander' + prefix mə-, 'acting like')
(184) Mustela vison (Mink)	lüsyen [liɬsyén]	lisẏaan	lisẏeen	nis'in	TL łukʷšiyaːn, nukʷšiyaːn, 'mink' (JL), but also cf. TL tlēnik'u´qū - mink (B91)	CT: "(blue) mink," "platinum mink;" ST, N, G: "mink;" cf. marten; originally Tlingit borrowing, reformation on TL łukʷšiyaːn, nukʷšiyaːn (reformation incorporates ẏeen, ẏaan, 'excrement')
(185a) ?Callorhinus ursinus (Northern Fur Seal, "Alaska Fur Seal")	k'oon [qʔɔ·n]	k'o'n/k'o'on	k'oon		HD k·ʼoā´n, 'fur seal' (B91); TL x̌ú·n, 'fur seal' (JL); CA kweni, 'seal' (M32), a Tsimshianic borrowing	CT: "(Northern) fur seal," "Alaska fur seal," "Callorhinus ursinus;" N: "fur seal Callorhinus ursinus" from Tlingit
(185b) ?C. ursinus	k'a'ootk [kʔɑʔɔ́·tʰkʰ]				HD qōt, 'seal' (borrowed from Tsimshian) (B91); HD xúut, 'seal' (L77)	CT: "baby seal" (may also refer to Phoca vitulina)
(186) Eumetopias jubatus (Northern Sea Lion) and/or †Odobenus rosmarus (Walrus)[68]	t'iibn, t'iibn	t'iibin	t'ibin [t'íbin]			CT: "sea lion," "walrus;" ST: "sea lion;" N: "northern sea lion Eumetopias jubata"
(187) ?Phoca vitulina (Harbour Seal, "Hair Seal")	uula, üüla	ẅẅla	ilx			CT: "seal," "hair seal," "harbour seal;" ST: "fur seal" (Phoca vitulina); N: "hair seal Phoca vitulina richardi" (M74)
(188) ?Mirounga angustirostris (Northern Elephant Seal)	badzit'óol [baʒitʔɔ́·ʌl]					CT: "elephant seal," "hooded seal," "sea elephant;"[69] lit., 'lifts hood'
(189) ?Procyon lotor (Raccoon)	dzoolky (B91, B12)					CT: "raccoon"
(190a) Ursus americanus (Black Bear, including Cinnamon Bear and Kermode Bear)	ol, al	ol	ul	ul		CT, N: "black bear;" N: also "any bear;" ST, G: "bear;"

[68] Walruses do not occur on the British Columbian coast (cf. Nagorsen 1990).

[69] Hooded seals (Cystophora cristata) do not occur on the British Columbian coast (cf. Nagorsen 1990).

(190b) U. americanus	t'u'u'tsgm 'ol [t?ú?u?ɔˀgm ?ól]					CT: translation from English "black bear"?
(190c) U. americanus	kɬgum'ol [kɬgum?ól]					CT: "bear cub;" lit., 'child of black bear'
(190d) U. americanus	soonɬk (B91, B12)					CT: "young bear"
(190e) U. americanus	sami		smax	smax		CT: 'meat;' 'black bear (pl.); N: 'meat;' 'black bear;' G: 'black bear,' 'body; in ST sə́mx = 'meat' (see Tarpent in this volume)
(190f) U. americanus			(sim) smax (R86)	sim smax		N, G: lit., 'real/best bear'
(190g) U. americanus	masgm'ol [màsgm̩?ól]					CT: "brown bear" (lit., 'red/brown bear,' possibly a brown colour morph of black bear)
(190h) U. americanus	moksgm'ol [mɔ̀ksgm̩?ól]					CT: "cinnamon bear," "white bear (Euarctos americanus kermodei)," "Kermodes bear," "Island white bear," "polar bear;"[70] lit., 'white bear,' probably Kermode bear
(190j) U. americanus	müs'ol [mɨs?ól]	mis'ola [mis'ɔ́la]				CT: "cinnamon bear (Note: local common name for Euarctos americanus kermodei, the Kermodes bear or island white bear, found on Cribbel Island" (root *mɛs, 'reddish/brown')
(190k) U. americanus			m̓aas'ul	m̓aas ol		N: 'white bear' (R86); N m̓aas, 'white, dazzling, brilliant' (possibly only refers to a crest symbol?); G: 'white bear'
(190l) U. americanus			fu		(Tsetsaut borrowing)	N: 'black bear' (a Tsetsaut word used only in Canyon City)
(191a) Ursus arctos (Grizzly Bear)	midíik [mɪdíʌkʰ], müdíik [mɨdí·ʌkʰ]	midiik	mediik			CT: "grizzly bear," "(African) lion;" ST, N: "grizzly bear;" also see (mythological) "sea grizzly"
(191b) U. arctos			lik'inskw [lɪkí?nskʷ], lik'iɬaxs [lɪkˈí?laxs]	lik'iń̓sxw		N, G: "grizzly bear" (probably a reformation on borrowing; N, G give the appearance of antipassives; second N form from Tombstone Bay, Alaska)
(192) Megaptera novaeangliae (Humpback Whale; Balaenopteridae) and/or Eschrichtius robustus (Gray Whale; Eschrichtidae) and possibly others	ɬbuun, ɬpun [ɬpun], ɬpuun, ɬpúun	m̓puun	hlbin		NU Xwɛɬbon, "Name obtained in the beginning of time from the Skeena people in whose language it is said to mean whale." (M92); <CT 'wiiɬbuun, 'big/great whale,' or may be 'wiɬbuun, 'getting whales'	CT: "whale," "lots," "plenty;" ST: "whale;" N: "humback [sic] whale Megaptera novoeangliae [sic]" (M74)
(193) ?Delphinus delphis (Saddle-backed Dolphin; Delphinidae) and/or Phocoenoides dalli (Dall's Porpoise) and/or, possibly, Phocoena phocoena (Harbor Porpoise)	dziiẅ, dziẅ		jiixw	jiixw	cf. TL čɨ·č, 'porpoise' (JL)	CT: "dolphin," "porpoise;" N: "porpoise;" G: "dolphin" (T-Wn.d.)

[70] Polar bears (Ursus maritimus) do not occur on the British Columbian coast (cf. Nagorsen 1990).

(194) ?Globicephala macrorhynchus (Short-finned Pilot Whale, "Blackfish")[71]			sdaẇaalip, sdaẇaalukw			N: "blackfish (not killer whale)" (partial sda, cf. sdil, 'accompany,' sdax-, 'on one side, etc.;' could be reformation on borrowing)
(195) Orcinus orca (Killer Whale)	'naaxɬ, neexɬ	ńiihl	ńeekhl	ńeexhl		CT: "blackfish," "killer whale," "false killer whale"[72] ST, N: "killer whale;" G: "killerwhale, blackfish"
(196a) ?Oreamnos americanus (Mountain Goat)	mati [mátʰi]	matx	matx	matx	HD mat', 'mountain sheep' (borrowed from Tsimshian) (B91); HD mat, "mountain goat" (L77)	CT: "mountain goat," "mountain sheep (bighorn sheep)," "domestic sheep;" ST: "mountain goat;" N: "mountain goat," "domestic sheep" (R86);[73] G: "mountain goat;" also see domestic goat
(196b) ?O. americanus	waaky, 'wáayg		ẇaagim matx			CT: "mountain goat kid;" ST: "kid, lamb"
(197) †Equus caballus (Horse)	gyudan [gʸudán], gyiwdn [gʸiwdn̓]		gyuwadan [gʸu·ʷdán]	gyuwadan	HA gawàdn̓, 'horse;' HD gyūdā´n, TL gyūdā´n, "horse" (CJ) (B91); CH kā'utan, 'horse' (B04)	CT, N, G: "horse" (<CT <CJ)
(198) †Sus scrofa (Domestic Pig)		gwasoo	gwaaso	gwasó	HA gʷasàu, 'domestic pig;' NU kusu, 'pig' (N90)	N: "pig;" <CJ, <French "cochon"
(199) †Bos taurus (Domestic Cow)	mismuus, müsmúus	mismuus	mismuus	mismuus (T-Wn.d.)	HA ms:muus, 'domestic cow;' NU musmus, 'cow, bovine' (N90)	CT, ST, N, G: "cow;" <CJ
(200) †Capra hircus (Domestic Goat)	dawe [dawé], dawee [dawé·]		daawe [da·wé]	dawe [dawé]	HA dawàɪ, 'domestic goat;' TL tawé, 'mountain goat' (B91)	CT: "billy goat," "domestic goat;" N: "mountain goat," "mountain sheep," "Dall's sheep," "domestic goat" (R86); G: "mountain sheep" (R86); <Tlingit
(201a) †Ovis aries (Domestic Sheep)			matx			N: "mountain goat," "domestic sheep" (see mountain goat)
(201b) †O. aries				lamato· (R86)	‡HA lamataù, "sheep;" NU lamatu, 'domestic sheep' (N90) (CJ)	G: <French "le mouton" (probably via Carrier, which has many CJ <French borrowings)
(202) Ovis canadensis (Bighorn Sheep, "Mountain Sheep")				dibe	BA dibeeyh, 'mountain sheep' (P&Tn.d.); CA dube, 'goat' (CLC74)	G: "mountain sheep;" "stone sheep" (T-Wn.d.); Athabaskan borrowing (same origin as terms for domestic goat)
(203) Ovis dalli (Thinhorn Sheep), including O. d. dalli (Dall Sheep)			matxim laxsgaʼnist			N: "Dall's sheep" (R86), lit., 'mountain goat of on mountain'
(204a) Alces alces (Moose) (also see Cervus elaphus [Elk])	muus	muus	muus	mu·s		CT, N, G: "moose;" <English, originally <Algonquian
(204b) A. alces (also see Cervus elaphus [Elk])				xadaa	CA khuda, 'moose' (CLC74); BA khida, 'moose' (P&Tn.d.)	G: "moose" (borrowed from Athabaskan)
(204c) A. alces				gʸe·se (R86)		G: "moose" (borrowing or foreign word of unknown origin)
(204d) A. alces				cʰiye (R86)	CA tsiye, 'moose, young (either sex)' (CLC74); CA (or SK) tsiyĕ, "[moose] fawn (a Sékanais word)" (M32)	G: "moose calf" (Athabaskan borrowing)

[71] Orcinus orca (killer whale), is sometimes referred to by the other English common names, orca and blackfish. The short-finned pilot whale is also referred to as blackfish or Pacific pilot whale. According to Cowan and Guiguet (1965) this latter species is known from British Columbia from several reliable sight records but only one authentic record.

[72] Pseudorca crassidens (false killer whale) usually ranges no farther north than California, although at least one dead specimen has been recorded for British Columbia (Nagorsen 1990). This species should probably not be regarded as a referent of the terms shown here.

[73] The Coast Tsimshian and other terms shown here likely only refer to mountain goat—see following entries for the other species listed by Dunn (1978).

(205) ?Cervus elaphus (Elk) (also see Alces alces [Moose])	łioon [łió·n], łiyüün [łiyí·n] (D78); łiyo·n (R86)					CT: "elk," "wapiti" (D78); "moose" (R86); N hlẏoon means 'elk/moose skin/hide;' G: hliyun means "tanned moose hide" (T-Wn.d.)[74]
(206a) Odocoileus hemionus (Mule Deer, including "Black-tailed Deer")	wan	xwan	wan	wan		CT, ST, N, G: "deer;" homophone of 'sit' (pl.) except in ST
(206b) O. hemionus	gwists'íik, gwüssiik, gwüsdzíik					CT: "fawn" (gwi- probably < łgwi..., 'little')
(207) Rangifer tarandus (Caribou)	wüdzii	wadziix	wijix [wiʒíx]	wijix (H&R); nijíhl (BR)	HA wzik, 'moose;' "elk" (C70):[75] CA whudzih, 'caribou' (CLC74); TL wutsí'ʜ, 'cariboo' (B91)	CT: "reindeer," "caribou," "moose," "elk;" ST: "caribou;" N: "caribou;" G: "caribou" (Tlingit/Athabaskan borrowing, later term perhaps an incorrect pronunciation or transcription)
Part 11 - General "Animal" Terms						
(208a) "Animal (sg.)," especially "Game Animal"	dzak'wüsk [ʒák^{w}ʔisk^{h}]	dzakw'isk [ʒák'^{w}ɩsk^{w}]	jakw'iskw [ʒág^{w}asx^{w}]	jagwasxw (BR)		CT: "animal (i.e., land animal; does not include flying animals nor water animals";[76] ST, N, G: "animal (sg.);" ST <dzakw, 'dead;' N, G <jakwt, 'to kill something'
(208b) "Animal (pl.)," "Land Animal," especially "Game Animals"	yetsisk [yɛ́c^{h}ɩsk^{h}], ye'tsisk [yɛ́ʔc^{ʾ}ɩsk^{h}], ya'tsisk [yáʔc^{ʾ}ɩsk^{h}], yetsk, [yɛc^{h}k^{h}]	yats'isk	yats'iskw [yáć̓ɩsk^{w}]	yajasxw [yáʒasx^{w}] (BR)		CT: "land animal;" CT, ST, N, G: "animal (pl.);" lit., 'killings;' N <yats, 'hit with great force (e.g., clubbed, etc.)'
(209) "Shore Animals (etc.)"	amgyeek [ʔamg^{y}é·k^{h}], amgyeeka [ʔamg^{y}é·k^{h}ɑ]					CT: "shore animals and plants; seashore life;" cf. CT amgyíik, "duck (etc.)," and N simgeek, "canvasback"
(210) "Water Animals"	lu'alm tsm'aks [luʔálṃc^{h}ṃʔáks]	luuwaalim ts'im aks	luuwilim ts'im aks [lu·wílim ts'im aks]			CT: "living things in the water; water life" (D78), "large water animals" (B02); ST, N: "living things in (marine or fresh) water;" CT, ST, N lu·-, 'in,' N wil, ST wa·l-, 'be, do'
Part 12 - Mythical or Legendary Entities and Taxa of Uncertain Biological Affiliation						
(211) Half-cuttlefish	xbihats'al [x̣bihɑcʔɑ́l]					CT: "half cuttlefish" (a crest symbol) (B91) (also see octopus)
(212) Supernatural Starfish	nɛxno'gɛm gamā'ts [naxnɔ́gəm gamá:c] (B16)					CT: "supernatural starfish" (a crest symbol); also see starfish
(213) Monster Crawfish	gibɛ'rɛlk (B16) [gibüülk]		jiibilkw	jiibilxw		CT: "monster crawfish" (a crest symbol); N: "a monster in the sea"
(214) Great Frog			ẇii ganaaẇ (B02)			N: "great frog" (with copper accessories)
(215) Double-headed Snake	lag̣ax-wā°s (B16) [lag̣ax-wá·s]		Laaxwoosa'a [la·x̣wó·saʔ]			CT: "Sisiutl (double-headed snake)" (B91), "two-headed monster" (B16); N: "two-headed monster;" CT lag̣ax-, N la·x̣-, 'at both ends;' CT wa·s, N wo·s, meaning unknown; cf. flying monster

[74] It is unlikely that the Coast Tsimshian term show here refers to elk since the former range of this species was restricted to southern Canada and the current range is much reduced and scattered throughout British Columbia in several locations well away from the Tsimshianic territories (cf. Cowan and Guiguet 1965; Nagorsen 1990; Whitaker 1980).

[75] For the reasons stated above, this term probably does not refer to elk. Moose and caribou, on the other hand, may be found in or near the Tsimshianic and nearby territories. Moose have expanded their range within British Columbia during the last 60 to 80 years (Nagorsen 1990) and are said by Nisga'a to have been common in the Nass Valley only since the Second World War.

[76] This term could probably be more accurately glossed as "game animal" (i.e., land mammals that are hunted). No Tsimshianic term exists that is in meaning to the scientific concept of "animal" (including a broad range of terrestrial and aquatic invertebrate and vertebrate organisms). Other First Nations groups may use similar special purpose "animal" terms or more taxonomic terms such as HA sìsak̓^{w}imas, which refers to the class of "quadruped terrestrial mammals, marine mammals, amphibians and some mythical or legendary entities" (Compton 1993b).

(216a) Thunderbird	galiplìip (B91)					CT: "thunderbird," "thunderbird in heaven;" lit., 'thunder'
(216b) Thunderbird				sgimsim		G: "thunderbird" (T-Wn.d.) (also see golden eagle)
(217) Monster/Fabulous Bird	asi-wā́l-g·ad (B16) [asiwá·lgat]					CT: "a monster" (B12), "a monster bird," "a fabulous bird, "bird dog" (a crest symbol) (B16); lit., 'causes accidents to people'
(218) Mythical Bird	Lax-ốm (B16) [laχ?ɔm]?					CT: "mythical bird;" could mean 'above us'
(219a) Flying Monster	gigum wāx (B16) [gì·gm wá·χ]					CT: "flying monster" (a crest symbol); "mosquito of..."?; cf. double-headed snake
(219b) Monster	wās (B12) [wā·s]					CT: "a monster" (B12, B16); cf. double-headed snake
(220) Man of the Woods, Sasquatch, Monkey[77]	Bagus* (B16); bg̲'os [bá?os] (D78)		bik'is	pek'is	HA/KW bk̓ʷs, "wild man of the woods, sasquatch"	CT: "name of supernatural being (from Kwakiutl bɛkɬús, man of the woods)" (B16); "monkey; any animal that can imitate human behavior with great alacrity and deftness" (D78); N: "monster;" G: "monkey," Sasquatch" (R86); also see monkey, bigfoot
(221) Fabulous Monster (similar to panther)	hawhaw [hawhá̱w], hg̲whg̲w [hɑwhɑ́w]					CT: "a fabulous monster, said to be similar to panther" (B12); also see cougar
(222) Long-nosed Giant Grizzly Bear	nahíngan, Nahēngan (B16)					CT: "long-nosed giant grizzly bear" (a crest symbol); "a monster, name of man" (borrowing?)[78]
(223) Grizzly Bear of Snow	wil-mádɛmtk mɛdí́°k (B16) [wil má·dmtga mɪdí·k]					CT: "Grizzly bear of snow" (a crest symbol); lit. 'when bear is covered in snow,' cf. N maadun, 'falling snow'
(224) White Bear			gwilkswoxgwit (B02)			N: "at himself barking (white bear)," lit., 'barker at self' (cf. coyote)
(225) †Ursus maritimus (Polar Bear)				m̓aas lik'iḿsxw		G: "polar bear," lit., 'white grizzly bear' (also see black bear and grizzly bear; this may refer to a crest symbol, rather than an actual animal)
(226) Half Beaver/Half Grizzly	xbi-stsɬâl-mɛdí́°k (Bo16) [χpi·-sćɔ́·l-mɪdí·k]					CT: "half beaver, half grizzly bear" (a crest symbol); lit., 'half beaver-grizzly bear'
(227) Sea Grizzly Bear	mɛdí́°gɛm tsɬɛm-áks (B16) [mɪdí·gm c̓m? áks]					CT: "sea grizzly bear" (a crest symbol); lit, 'grizzly bear of in water'
(228) Dwarf	G·ilg·inámgan (B16)		G·îlg·înā́mgan (B02) [G'lginaamgan]		KW G·ing·inā́nɛmis, dwarfs or "children of the sea," mentioned in story of dwarfs and cranes (B02); cf. HA giglànuwis, "dwarf" (not human)	CT, N: "dwarfs"
(229a) Raven (transformed into Big Man, Giant)	Wɪ-g·á·d (B16) [ẇi·gʸat]		ẇii gat	'wii gget	HA (Gm.) ẇɪgt, "common raven" (Tsimshian borrowing, literally, 'big man')	CT: "man's name (=giant);" N, G: 'big man' (another name for Tx̲eemsim); also see raven
(229b) Raven, (transformed, myth name)	Txaamsm̱ [tx̲á·msm̱]		Tx̲eemsim			CT, N: name of Raven, a culture hero, also known when in human form as 'big man'—see Part 12)

[77] Monkeys are not native to British Columbia, but this term likely refers to any member of Superfamily Ceboidea (New World monkeys), Superfamily Cercopithecoidea (Old World monkeys) and members (excluding human) of Superfamily Hominoidea (higher apes and human). "Bigfoot" is either a mythical entity or an entity of undetermined biological affiliation).

[78] In Haisla/Henaaksiala, the term ḿazìɬba (literally, 'mouse-nosed bear') seems to refer to Kermode bear (Compton 1993b).

(230) Sea Monster	Ts!ɛm-a´ks (B16) [č̣ɪm ʔǻks]					CT: "a sea monster, personification of snag, in form of a raven (=in water)"
(231) Sea Monster	wil-mɪs (B16) [wɪl mɪ́·s]					CT: "a sea monster" (a crest symbol); "when it's red/when they're at spawning time"
(232) Sea Monster	ha-k!ulô´x (B12), Hak!ulâ´q (B16) [hak'ulɔ́·q]		hagwi̲l̲oo̲k̲'			CT: "a sea monster," "skilful;" N: "a sea monster;" "very industrious, hard-working"
(233) Sea Monster	xā°ɬ (B16) [x̣ɑ́·ɬ]					CT: "a fabulous animal" (could be Tlingit?)
(234) Sea Monster	Xbī-ɣē´lk (B16) [x̣pɪ·-ɣɛlk]					CT: "man's name (said by Boas to be contracted from xbɪ-lɪɬ-hak!ulâ´°q, half-hairy sea monster)"
(235) Lake Being	Dzaga-dɪ-lâ´o (B16) [ʒaga-dɪlɔ́ʌ]					CT: "name of a lake-being (=staying across on the water);" seems to mean, "causing (something) to stay afloat, or dragging (something) across (while swimming)"
(236) Ocean Being	Na-gun-a´ks (B16)					CT: "an ocean-being (=looking like water)"

DISCUSSION

I. Linguistic Comments:

Table 1 contains 371 rows of entries, each containing from 1 to 4 related Tsimshianic forms. This very rich collection of data can be studied from several different linguistic points of view. Only brief indications will be given here, with additional comments to await more detailed study.

A. Vocabulary Structure:

Morphology—The names can be divided into single morphemes (or currently unanalyzable forms), e.g., N us, 'dog;' reduplicated forms (particularly common with bird names), e.g., N gwisgwoos, "blue jay;" derivatives, meaning words formed from other words by the addition of other materials, often with prefixes such as sim, 'real, genuine,' or suffixes such as -it, 'the one which...;' and compounds, often designating a particular variety which differs from the more commonly known one, e.g. N gaakhlim ts'im aks, 'water shrew,' literally, 'mouse-of in water.' These divisions apply to Tsimshianic words.

Borrowings—These are words adopted from other languages, often with some change occurring in the transfer. Straight borrowings are those adopted with only minimal changes, necessary to adopt them to Tsimshianic pronunciation. A study of how sounds are adopted can determine the direction of borrowing. For instance, Wakashan words usually have more complex consonants which are simplified to adopt them into a Tsimshianic language. Borrowing has also taken place internally, i.e., the Interior languages have borrowed many words designating small marine invertebrate animals from Coast Tsimshian. This can be determined because the words have kept their Coast Tsimshian form, while other cognates show a regular sound correspondence, but are rarely identical.

Sometimes a word from another language sounds similar enough to a Tsimshianic one that people believe that it must mean something, and they reform the word so that at least a portion of it makes sense, as in many Tsimshianic words. An example is N majiluulaḵ, "moth," where the maji- part comes from the Carrier word mesdi-, meaning 'little,' and the word that originally followed has changed to N luulaḵ, 'ghost.' The resulting word seems to have something to do with ghosts, which are often associated with moths.

B. Distribution and Interpretation

A glance at Table 1 will show which names occur in all 4 Tsimshianic languages, or at least in 3, and which ones in only 2 or 1. In many cases, names which occur only in 2 languages cluster either in the Maritime or the Interior pair. For those which occur in one of each of these groupings (usually in Coast Tsimshian and Nisgha), this may reflect a lack of information on the other languages rather than the lack of a corresponding word.

Of the 361 entries, more than 93 are common to at least 3 of the 4 languages. A high proportion of these are names for mammals (35) and fish (20), followed by birds (17) and invertebrate animals (including 11 marine invertebrates and 10 terrestrial invertebrates). Words existing only in both Coast Tsimshian and Southern Tsimshian number only 12, mostly names for mammals and birds, while 32 words are common only to Nisgha and Gitksan—mostly names for mammals (12) and invertebrates (10).

A preliminary count of the number of borrowings in different categories shows that the total proportion is about 25% of the zoological vocabulary. This proportion is not the same in all animal categories, however. The proportion of native words is highest among birds and fish (approximately 75%), and lowest among mammals, where only half of the vocabulary is made up of true Tsimshianic words, the rest being borrowings or of indeterminate origin. differences in borrowing are also obvious between the 4 languages, reflecting their geographical situation and historical relationships. In general, Coast Tsimshian and Southern Tsimshian have borrowed most heavily from the neighbouring Wakashan languages Haisla and Henaaksiala, especially for names of fish and marine invertebrates. Interestingly, such borrowings have not involved names for marine mammals with the exception of the fur seal which is designated in all the Tsimshianic languages by a Tlingit name. Some of these have found their way into Nisgha and Gitksan through internal borrowing of these Coastal Tsimshianic words for coastal animals. On the other hand, Nisgha and Gitksan have borrowed many names of land mammals from Tlingit and Athabascan; the Athabascan influence being particularly notable in Gitksan. All these borrowings reflect a long history of contacts of the Tsimshianic-speaking peoples with their respective neighbours (cf. Rigsby 1967).

The proportions of the different types of vocabulary elements, and the more or less complete integration of borrowings through phonological adaptation and reformation, reflect the importance of the animals in the lives of the people and the depth of their acquaintance with them. Single morpheme names (or those which are unanalyzable though probably not borrowed) are more ancient than derivatives and compounds, though less colourful because they do not mean anything else.

One example will serve to show the recent viability of the languages and the productivity of the compounding process for description. The old Tsimshianic word for 'mountain lion, cougar' was CT, ST hawhaw, N, G haway. During the missionary period, this word was used to translate the English word "lion" which occurred in Biblical texts. Meanwhile, the introduction of domestic cats had brought into use the word duus (from the Chinook Jargon). Accordingly, the mountain lion was renamed CT duusim gilhawli, N, G duusim gililx, 'cat-of up-in-the-woods'—a spontaneous compound, not a translation of the English name.

II. Ethnobiological Comments:

More than 200 zoological taxa (excluding humans and entities generally perceived as mythical) are represented by the Tsimshianic animal names presented in Table 1. Not surprisingly, most of the names refer to birds, fish and mammals, however various types of marine invertebrates are also well represented. This total is comparable to the number of zoological taxa recognized and named among the Haisla and Henaaksiala (Compton 1993b) but likely is an understatement of the total number of creatures known and named among the Tsimshianic cultures.

Although these data have not been investigated fully with Tsimshianic-speaking individuals using voucher specimens, and ethnographic data on Tsimshianic animal knowledge and use are seriously lacking, some interesting ethnobiological features may be noted regarding the data in Table 1. For example, no Tsimshianic term that serves to label the animal kingdom is evident—a common feature among diverse peoples of the world whose ethnobiological classification systems have been studied and compared cross-culturally (Berlin 1992; Brown 1984; cf. Compton.et al. 1993). Instead, the items glossed as "animal" in Table 1 seem instead to refer exclusively to game animals (the majority of which would be relatively large terrestrial mammals).

Other highly-inclusive Tsimshianic zoological terms (which in Berlin's and Brown's systems would be labelled as life-form taxa) are evident however, including those that are equivalent in application to English bird and snake (or worm). The terms often glossed simply as "fish" (i.e., CT hon, hoon, hóon; SThoon, N hoon, G hon), however, are likely not terms that refer collectively to any and all fishes. Instead, they seem to refer in a more limited sense to any salmon and steelhead trout. Nor is a Tsimshianic "mammal" term apparent from the data in Table 1. Further, from comparison with Haisla and Henaaksiala data (Compton 1993b) it would seem possible that the Tsimshianic 'bird' terms may also include reference to flying and gliding mammals (bats and northern flying squirrel).

The majority of animal names in Table 1 are those that label generic taxa which generally correspond to biological species (Berlin 1992) although there are many terms—especially those applied to bears—that label genetic zoological variants.

In general, much additional research is required to make more substantive statements regarding the general and specific details of Tsimshianic zoological classification and to compare them productively with comparable data from other First Nations groups of British Columbia (Compton 1993b; Compton et al. 1993). Further attention should also be devoted to the documentation of additional information regarding the cultural roles of animals in the Tsimshianic cultures. These efforts should include the use of voucher specimens to guarantee the accuracy of the zoological identifications of taxa labelled by Tsimshianic zoological terms.

CONCLUSIONS

Our main goal in the current paper has been to offer a systematic and comprehensive presentation of Tsimshianic animal names with some linguistic and ethnobiological commentary on those data. In addition, we hope to have inspired other linguists familiar with the non-Tsimshianic languages we have mentioned in this paper to offer their insights regarding the influences of non-Tsimshianic nomenclatural items on the Tsimshianic zoological lexicon.

Our analysis of the data in this paper is far from comprehensive and it is clear from our efforts to date that further analyses and discussion of Tsimshianic zoological nomenclature and classification as well as other aspects of Tsimshianic ethnozoology is warranted. What is clear from our efforts is that the linguistic study of Tsimshianic animal names is valuable from an ethnobiological perspective, as it gives clues to their referents and suggests avenues for further ethnobiological inquiry. As well, the study of these names is also rewarding for the linguist, from the different points of view of vocabulary structure, semantics, and both internal and external comparative phonology.

A study such as this one brings to light the necessity of interdisciplinary cooperation. While the linguist consulting works of biology may bemoan the poor quality of transcriptions and translations of native names in those works (if these names are used at all), the biologist may likewise be disheartened by the scantiness and inaccuracy of the biological identifications contained in many works by linguists. Workers in both disciplines can be of invaluable assistance to one another in illuminating each other's work. For example, the meaning of a descriptive name, created from an intimate knowledge of an animal's appearance and habits, can be a clue to its correct biological identification. Conversely, the linguist unaware of the nature and diversity of the fauna within a given linguistic region may miss the opportunity to record important lexical material. The study of animal names, from both the biological and the linguistic perspectives, represents a vital element in the

study of the relationship between human groups and the languages they speak as well as their relationship to their environment.

ACKNOWLEDGEMENTS

We wish to thank Mrs. Violet Neasloss whose amiable nature and knowledge of Tsimshianic linguistic and biological matters has made our work with her extremely rewarding in both social and academic terms. We also wish to acknowledge and gratefully thank Mrs. Francesca Antoine and Mr. Gordon Robertson for their contributions to this paper in terms of comparative data.

Dr. Bruce Rigsby allowed us to cite data from his unpublished work on Tsimshianic biological terminology. Rosalind Whalley made data available from her research with Gitksan individuals. We are appreciative and thankful for their kind and generous contributions.

REFERENCES

Abbott, R.T. 1990. Seashells. Gallery Books, New York.

Berlin, B. 1992. Ethnobiological Classification: Principles of Categorization of Plants and Animals in Traditional Societies. Princeton University Press, Princeton, New Jersey.

Boas, F. 1891. Vocabularies of the Tlingit, Haida and Tsimshian Languages. Proceedings of the American Philosophical Society 29(136):173-207. (abbreviated in Table 1 as B91)

_____. 1902. Tsimshian Texts (Nass River dialect). Bulletin 27, Bureau of American Ethnology. Smithsonian Institution, Washington, D.C. (abbreviated in Table 1 as B02)

_____. 1904. The Vocabulary of the Chinook Language. American Anthropologist (N.S.) 6(1):118-147. (abbreviated in Table 1 as B04)

_____. 1912. Tsimshian Texts (New Series; collected by Henry W. Tate in the Tsimshian dialect of the Tsimshian language). Publications of the American Ethnological Society, Vol. III, pp. 65-284. E.J. Brill, Leyden, Holland. (abbreviated in Table 1 as B12)

_____. 1916. Tsimshian Mythology (based on [Port Simpson] texts recorded by Henry W. Tate). Thirty-first Annual Report of the Bureau of American Ethnology, 1909-10. Smithsonian Institution, Washington, D.C. (abbreviated in Table 1 as B16)

_____. 1928. Bella Bella Texts. Columbia University Contributions to Anthropology, Vol. V. Columbia University Press, New York. (abbreviated in Table 1 as B28)

_____ (H.B. Yampolsky, ed.). 1947. Kwakiutl Dictionary. Ms. #30W1a.21. American Philosophical Society, Philadelphia. (abbreviated in Table 1 as B47)

Boitani, L. and S. Bartoli. 1983. The Macdonald Encyclopedia of Mammals. Macdonald and Co. Ltd., London, England.

Brown, C.H. 1984. Language and Living Things: Uniformities in Folk Classification and Naming. Rutgers University Press, New Brunswick, New Jersey.

Carl, G.C. 1963. Guide to Marine Life of British Columbia. Handbook No. 21. British Columbia Provincial Museum, Victoria, British Columbia.

_____, W.A. Clemens and C.C. Lindsey. 1967. The Fresh-water Fishes of British Columbia (3rd Edition). Handbook No. 5. British Columbia Provincial Museum, Victoria, British Columbia.

Carrier Linguistic Committee. 1974. Central Carrier Bilingual Dictionary. Summer Institute of Linguistics, Fort Saint James, British Columbia. (abbreviated in Table 1 as CLC74)

Compton, B.D. 1993a. Upper North Wakashan and Southern Tsimshian Ethnobotany: The Knowledge and Usage of Plants and Fungi Among the Oweekeno, Henaaksiala (Kitlope and Kemano), Haisla (Kitamaat) and Kitasoo Peoples of the Central and North Coasts of British Columbia. Unpublished Ph.D. dissertation. Department of Botany. The University of British Columbia, Vancouver, British Columbia.

_____. 1993b. Henaaksiala and Haisla Ethnozoology. Unpublished manuscript. Department of Botany. The University of British Columbia, Vancouver, British Columbia.

_____. 1993c. Tsimshianic Botanical Terminology. Unpublished manuscript. Department of Botany. The University of British Columbia, Vancouver, British Columbia.

_____. 1993d. Tsimshianic Zoological Terminology. Unpublished manuscript. Department of Botany. The University of British Columbia, Vancouver, British Columbia.

_____ and D. Gardiner. 1993. Sphingids, Saturniids, and the Spectre of Death: Ethnoentomology of Some Macrolepidoptera in British Columbia. Unpublished manuscript submitted to the Shuswap Language Program. Secwépemc Cultural Education Society, Kamloops, British Columbia

_____, _____, J. Michel and W.A. Arnouse. 1993. An Idiolectal Secwepemctsín Ethnozoological Database. Pp. 28-77 in: Collected Papers of the 28th International Conference on Salish and Neighbouring Languages held 19-21 August 1993 at the University of Washington, Seattle, Washington.

Cowan, I.M. and C.J. Guiguet. 1965. The Mammals of British Columbia. Handbook No. 11. British Columbia Provincial Museum, Victoria, British Columbia.

Curtis, E.S. 1970 [1915]. The American Indian, Vol. 10: The Kwakiutl. Johnson Reprint Corporation, New York. (originally published by the author, 1915) (abbreviated in Table 1 as C70)

Dunn, J.A.. 1978. A Practical Dictionary of the Coast Tsimshian Language. National Museum of Man Mercury Series, Canadian Ethnology Service Paper No. 42. National Museums of Canada, Ottawa, Ontario. (abbreviated in Table 1 as D78)

Ellis, D.W. and S. Wilson. 1981. The Knowledge and Usage of Marine Invertebrates by the Skidegate Haida People of the Queen Charlotte Islands. Monograph Series No.1. The Queen Charlotte Islands Museum Society, Queen Charlotte Islands.

Emmons, G.T. 1991. The Tlingit Indians (edited with additions by F. de Laguna). Number 70, Anthropological Papers of the American Museum of Natural History. Douglas & McIntyre Ltd., Vancouver, British Columbia. (Note: Transcriptions of Tlingit terms presented in this volume were verified and provided by Jeff Leer. Therefore, all terms cited from this source are designated by the initials "JL," as are data derived from Leer 1990. Note also, however, that some glosses of Tlingit terms presented in the current work may represent data provided by Emmons or de Laguna.)

Hart, J.L. 1973. Pacific Fishes of Canada. Bulletin No. 180, Fisheries Research Board of Canada, Ottawa.

Hill, C. 1993a. Birds in and Around Hartley Bay. Term paper for Biological Sciences 310 (Plants and Animals of British Columbia). First Nations Language Teacher Program, North Coast Tribal Council Education Centre/Simon Fraser University Department of Education. Prince Rupert, British Columbia. (abbreviated in Table 1 as H93a; Data for this report were provided by Cameron Hill's father and grandmother, Ernie Hill, Jr. and Marjorie Hill.)

Hill, E.-A. 1993b. Hartley Bay Tidal Zones. Term paper for Biological Sciences 310 (Plants and Animals of British Columbia). First Nations Language Teacher Program, North Coast Tribal Council Education Centre/Simon Fraser University Department of Education. Prince Rupert, British Columbia. (abbreviated in Table 1 as H93a; Data for this report were provided by Cameron Hill's father and grandmother, Ernie Hill, Jr. and Marjorie Hill.)

Hindle, L. and B. Rigsby. 1973. A Short Practical Dictionary of the Gitksan Language. Northwest Anthropological Research Notes 7(1). (abbreviated in Table 1 as H&R73)

John, G. and M. John, Sr. (n.d.) Saik'uz Whut'enne Hubughunek al Classrom Dictionary. Yinka Dene Language Institute, Vanderhoof, British Columbia. (abbreviated in Table 1 as J&Jn.d.)

Jones, J.R.J.L. 1951. An Annotated Check List of the Macrolepidoptera of British Columbia. Occasional Paper No. 1. The Entomological Society of British Columbia.

Kari, James. 1977. Dena'ina Noun Dictionary. Alaska Native Language Center, Fairbanks, Alaska.

Kozloff, Eugene N. 1983. Seashore Life of the Northern Pacific Coast. Douglas and McIntyre, Vancouver, British Columbia.

Lamb, A. and P. Edgell. 1986. Coastal Fishes of the Pacific Northwest. Harbour Publishing Co. Ltd., Madeira Park, British Columbia.

Lawrence, E. 1977. Haida Dictionary. Society for the Preservation of Haida Language and Culture and The Alaska Native Language Centre, Fairbanks, Alaska. (abbreviated in Table 1 as L77)

Leer, J. 1990. Tlingit: A Portmanteau Language Family. (Data from this source are cited as "JL.")

Lincoln, N.J. and J.C. Rath. 1980. North Wakashan Comparative Root List. National Museum of Man Mercury Series, Canadian Ethnology Service Paper No. 68. National Museums of Canada, Ottawa, Ontario. (abbreviated in Table 1 as L&R80)

_____ and _____. 1986. Phonology, Dictionary and Listing of Roots and Lexical Derivates of the Haisla Language of Kitlope and Kitimaat, B.C. (2 Vols.). Canadian Museum of Civilization Mercury Series, Canadian Ethnology Service Paper No. 103. National Museums of Canada, Ottawa, Ontario. (abbreviated in Table 1 as L&R86)

McIlwraith, T.F. 1992 [1948]. The Bella Coola Indians. University of Toronto Press, Toronto, Ontario. (Reissued version of a work originally published in 1948 and with a new introduction by John Barker) (abbreviated in Table 1 as M92)

McNeary, S. 1974. The Traditional Economic and Social Life of the Niska of British Columbia. A Final Report for the National Museum of Man, Ottawa, Ontario. (abbreviated in Table 1 as M74)

Meinkoth, N.A. 1981. The Audubon Society Field Guide to North American Seashore Creatures. Alfred A. Knopf, New York.

Morice, Father A.G. 1932. The Carrier Language (Déné Family) (2 Vols.). Anthropos, St.-Gabriel-Mödling, Austria. (abbreviated in Table 1 as M32)

Nagorsen, D. 1990. The Mammals of British Columbia - A Taxonomic Catalogue. Memoir No. 4. Royal British Columbia Museum, Victoria, British Columbia.

Naish, C. and F. Story. 1963. English-Tlingit Dictionary. Summer Institute of Linguistics, Fairbanks, Alaska. (abbreviated in Table 1 as N&S63)

Nater, H.F. 1977. Stem List of the Bella Coola Language. The Peter De Ridder Press, Lisse, Netherlands. (abbreviated in Table 1 as N77)

_____. 1990. A Concise Nuxalk-English Dictionary. Canadian Ethnology Service Mercury Series Paper 115. Canadian Museum of Civilization, Ottawa, Ontario. (abbreviated in Table 1 as N90)

Newman, S. 1974. Linguistics Retention and Diffusion in Bella Coola. Language in Society 3:201-214. (abbreviated in Table 1 as N74)

Olson, R.L. 1940. The Social Organization of the Haisla of British Columbia. University of California Anthropological Records 2 (5):169-200.

Patrick, D. and S. Tress. (n.d.) Nedut'en (Babine) Bilingual Classrom Dictionary. Yinka Dene Language Institute, Vanderhoof, British Columbia. (abbreviated in Table 1 as P&Tn.d.)

Peden, A.E.. 1990a. Freshwater Fishes. Pp. 19-22 In Robert A. Cannings and Andrew P. Harcombe, eds. The Vertebrates of British Columbia: Scientific and Common Names. Royal British Columbia Museum Heritage Record No. 20; Wildlife Report No. R-24. Ministry of Municipal Affairs, Recreation and Culture and Ministry of Environment. Victoria, British Columbia.

_____.. 1990b. Marine Fishes. Pp. 5-17 In Robert A. Cannings and Andrew P. Harcombe, eds. The Vertebrates of British Columbia: Scientific and Common Names. Royal British Columbia Museum Heritage Record No. 20; Wildlife Report No. R-24. Ministry of Municipal Affairs, Recreation and Culture and Ministry of Environment. Victoria, British Columbia.

People of Port Simpson. 1983. Port Simpson Foods. Port Simpson Curriculum Committee and School District No. 52. Prince Rupert, British Columbia. (abbreviated in Table 1 as PPS83)

Pinnow, Heinz-Jürgen. 1969. Entlehnung von Tiernamen in Tsimshian und Na-Dene sowie Grundsätzliches zur Entlehnungsfrage bei Indianersprachen. Zeitschrift für Ethnologie 94(1):82-102.
Rath, J.C. 1981. A Practical Heiltsuk-English Dictionary with a Grammatical Introduction (2 Vols.). National Museum of Man Mercury Series, Canadian Ethnology Service Paper No. 75. National Museums of Canada, Ottawa, Ontario. (abbreviated in Table 1 as R81)
Rigsby, B. 1967. Tsimshian Internal Relations. Unpublished manuscript.
_____. 1968. Some Linguistic Insights into Recent Tsimshian Prehistory. Unpublished manuscript.
_____. 1986. Comparative Tsimshianic Flora and Fauna Terms. Unpublished manuscript. (abbreviated in Table 1 as R86)
Sapir, E. 1949 [1916]. Time Perspective in Aboriginal American Culture: A Study in Method. Pp. 389-462 in: D.G. Mandelbaum (ed.) Selected Writings of Edward Sapir in Language, Culture, and Personality. University of California Press, Berkeley, California.
Scott, W.B. and E.J. Crossman. 1973. Freshwater Fishes of Canada. Bulletin 184. Fisheries Research Board of Canada, Ottawa, Ontario.
Swanton J.R. 1911. Haida. In: Boas, F. (ed.), Handbook of American Indian Languages. Bureau of American Ethnology Bulletin No. 40. Smithsonian Institution, Washington, D.C.
Tarpent, M-L. 1983. Morphophonemics of Nisgha Plural Formation: A Step Towards Proto-Tsimshian Reconstruction. Studies in American Languages II. Kansas Working Papers in Linguistics 8(2):123-214.
_____. 1991, 1992, 1993, Klemtu field-notes (Southern Tsimshian).
_____. 1994a. Tsimshianic Animal Names. Unpublished manuscript.
_____. 1994b. Tsimshianic Stress Assignment and the Words for 'Meat, Bear.' Collected Papers of the 29th International Conference on Salish and Neighbouring Languages held 11-13 August 1994 at Salish Kootenai College, Pablo, Montana. (See this volume.)
Tarpent, M.-L., ed. 1986. Haníimagoonísgum-algaxhl Nisga'a/Nisgha Phrase Dictionary. Bilingual/Bicultural Centre. School District No. 92 (Nisgha), New Aiyansh, British Columbia. (abbreviated in Table 1 as NPD)
Thistle-Walker, R. (no date). Gitxsan-English Dictionary. Unpublished manuscript. Gitxsan Native Studies Program. School District No. 88, Terrace, British Columbia. (abbreviated in Table 1 as T-Wn.d.)
Turgeon, D.D., A.E. Bogan, E.V. Coan, W.K. Emerson, W.G. Lyons, W.L. Pratt, C.F.E. Roper, A. Scheltema, F.G. Thompson, and J.D. Williams. 1988. Common and Scientific Names of Aquatic Invertebrates from the United States and Canada: Mollusks. American Fisheries Society Special Publication 16. American Malacological Union, Bethesda, Maryland.
Udvardy, M.D.F. 1977. The Audubon Society Field Guide to North American Birds, Western Region. Alfred A. Knopf, New York.
Whitaker, Jr., J.O. 1980. The Audubon Society Field Guide to North American Mammals. Alfred A. Knopf, New York.

APPENDIX 1—Entry Index in Alphabetical Order by English Common Name

abalone (13)
animal (208, 209, 210)
ant (42)
auklet, rhinoceros (119)
barnacle (26)
bat (156)
bear, black (and variants) (190)
bear, grizzly (191)
bear, grizzly of snow (223)
bear, long-nosed giant grizzly (222)
bear, polar (225)
bear, sea grizzly (227)
bear, white (224)
beaver (161)
beaver, half/half grizzly (226)
bee (43)
beetle (34)
being, lake (235)
being, ocean (236)
bigfoot (158)
bird (88)
bird, monster/fabulous (217)
bird, mythical (218)
bird, unidentified (152, 153)
blackcod, Alaska (73)
blackfish (194)
bobcat (175)
brant (97)
bullhead (76)
bumblebee (43)
bunting, snow (147)
butterfly (35)
caribou (207)

cat (174)
catbird (142)
caterpillar (37)
chickadee (137)
chicken (113)
chipmunk (168)
chiton (Mopalia hindsi) (9)
chiton, black katy (8)
chiton, gum boot (7)
clam, butter (20)
clam, horse (21)
clam, little-neck (19)
cockle (15)
cod, Pacific or gray (69)
coral (2)
cormorant (91)
cougar (173)
cow (199)
coyote (170)
crab, Baird's and/or spider (28)
crab, dungeness (27)
crab, hermit (29)
crab, unidentified (30)
crane, sandhill (115)
crawfish, monster (213)
cricket (32)
crow, northwestern (134)
cucumber, sea (stichopus) (47)
deer (206)
dog (169)
dogfish (51)
dolphin (193)
dove, rock (120)
dragonfly and/or damselfly (31)
duck (93)
duck, bufflehead (99)
duck, harlequin (101)
duck, pintail (102)
duck, unidentified (149, 150, 151)
duck, wood (94, 95)
dwarf (228)
eagle, bald (108)
eagle, golden (106)
eel (49)
elk (205)
ermine (183)
eulachon (68)
falcon (109)
fish (48)
fisher (181)
flea (41)
flicker, northern (128)
flounder (77, 79, 80)
fly (38)
fly, black (38)
fly, coho (38)
fly, horse (38)
fox, red (172)
frog (86)
frog, great (214)
goat (200)
goat, mountain (196)
goldeneye (95)
goose, cackling Canada (97)
goose, Canada (98)
goose, snow (98)
grasshopper (24, 32)
grebe, western (90)
greenling (74)
gribbles (25)
grouse (110, 111, 112)

gull (118)
half-cuttlefish (211)
halibut, Pacific (78)
hare, snowshoe (159)
hawk (105, 107, 109)
heron, great blue (92)
herring (54)
horse (197)
human (157)
hummingbird, rufous (126)
jay, blue (136)
jay, gray (136)
jay, Steller's (136)
jellyfish (1)
junco, dark-eyed (144, 147)
kingfisher, belted (127)
lamprey (49)
leech (6)
limpet, shield (12)
lingcod (75)
lion (176)
loon (89)
louse (33)
lynx (175)
maggot (40)
mallard (96)
marmot, hoary (166)
marten (180)
merganser (102, 104)
mink (184)
minnow (65, 83)
monkey (158)
monster (219)
monster (similar to panther) (221)
monster, sea (230, 231, 232, 233, 234)
moose (204)
mosquito (38, 39)
moth (36)
mouse (162, 163)
murrelet, ancient (90)
muskrat (160)
mussel, California (16)
mussel, edible (17)
newt (85)
nighthawk, common (125)
octopus (23)
otter, river (179)
otter, sea (177)
owl (121, 122, 123, 124)
oystercatcher, black (116)
partridge (110)
pig (198)
pigeon, band-tailed (120)
porcupine (164)
porpoise (193)
ptarmigan (110, 112, 114)
raccoon (189)
rat (163)
ratfish, spotted (53)
Raven (229)
raven, common (135)
robin, American (141)
rockfish, black (71)
rockfish, yelloweye (72)
salamander (85)
salmon (56)
salmon, Chinook, spring or jack (61)
salmon, chum or dog (58)
salmon, coho or silver (59)
salmon, kokanee (60)
salmon, pink or humpback (57)
salmon, sockeye or red (60)

sandpiper, spotted (117)
sapsucker, red-breasted (129)
Sasquatch (220)
scallop (18)
scoter (102, 103, 119)
sculpin (76)
sea Anemone (3)
sea lion, northern (186)
seal, fur (185)
seal, harbour (187)
seal, northern elephant (188)
shark (50, 81)
sheep (201)
sheep, bighorn (202)
sheep, thinhorn (including Dall sheep) (203)
shell, sea (22)
shiner, golden (65)
shipworm (14)
shrew (154, 155)
siskin, pine (148)
skate (52)
skunk, striped (182)
slug (10)
smelt, surf (67)
snail (10)
snake, double-headed (215)
snake, garter (87)
snapper, grey (84)
snapper, red (72)
snipe, common (117)
sparrow (145, 146)
sparrow, golden-crowned (143)
spider (24)
squawfish, northern (66)
squid (23)
squirrel (168)
squirrel, northern flying (165)
starfish (44)
starfish, supernatural (212)
stichopus (47)
swallow (133)
swan, trumpeter (100)
teal (95)
thrush, hermit and/or varied (139)
thrush, Swainson's (140)
thunderbird (216)
toad (86)
tomcod, Pacific (69)
trout, Dolly Varden (63)
trout, lake (64)
trout, rainbow and steelhead (62)
trout, unidentified (82)
urchin, green sea (45)
urchin, purple sea (46)
urchin, red sea (46)
walrus (186)
warbler (143, 147)
wasp (43)
weasel (183)
whale (192, 194)
whale, killer (195)
whelk (11)
whitefish (55)
wolf, gray (171)
wolf-eel (70)
wolverine (178)
woodchuck (167)
woodpecker (130, 131, 132)
woodpecker, hairy
worm, earthworm (4)
worm, marine (5)
wren, house and/or winter (138)