The Sucker: A Fish Full of Bones, Coyotes, Coots, and Clam Shells

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ABSTRACT.--Suckers (Catostomus spp.) have traditional roles as food and mythological figures in several Plateau cultures of the Pacific Northwest of North America, including the Secwépemc of south central British Columbia. These fish have skulls that may be disarticulated into several distinct elements that, among the Secwépemc, have been interpreted as representing animals that are native to traditional Secwépemc territory. This paper presents a discussion of suckers in Secwépemc culture including Secwepemctsín sucker nomenclature and osteocranial terminology, zoological identifications of the animals considered to be represented by sucker skull bones, and scientific osteological identifications of the sucker skull bones that are mentioned in Secwépemc mythology.

THE SECWÉPEMC

Among the many original human groups of the Pacific Northwest are the Secwépemc (anglicized as Shuswap), who inhabit the Plateau, or Interior, region of British Columbia. Secwépemc pre-history extends to several thousand years before the present when at one point their population may

have exceeded 20,000 individuals. Extensive population loss occurred during the last several generations because of mortality from diseases introduced through European and Euro-Canadian contact. Consequently, today only seventeen of the original 30 distinct Secwépemc communities, or bands, remain, consisting of a total population of approximately 5000 Secwépemc (Siska 1988).

The language of the Secwépemc, referred to as Secwepemctsín (or Shuswap), continues to be spoken, primarily among a declining community of elderly individuals. However, its use is encouraged among younger Secwépemc who may study this language from elementary to post-secondary levels in various communities throughout Secwépemc territory. The language is considered to be comprised of two dialects, a western division (referred to as Western Shuswap) and an eastern division (Eastern Shuswap). The former dialect is spoken today primarily among members of the Alkali Lake, Big Bar, Canim Lake, Canoe Creek/Dog Creek, Kamloops, North Thompson, Pavilion, Skeetchestn, Soda Creek, Stuctwesemc, Sugar Cane, and Whispering Pines bands. The latter dialect is characteristic of speakers from the Adams Lake, Little Shuswap, Neskonlith, Shuswap, and Spallumcheen bands. Secwepemctsín is one of the Interior Salish languages, its most close linguistic counterparts are the other Northern Interior Salish languages Nlakapamuxcín (spoken by the Nlakápamux, or Thompson Indians) and St'át'imcets (spoken by the St'át'mc, or Lillooet people). These languages are also related, though less closely, to another Interior Salish language, Okanagan (spoken by the Okanagan people).

The traditional Secwépemc lifestyle involved seasonal movements, often over great distances, in pursuit of fish, game and a variety of botanical foods and resource materials. Summer homes were constructed of lightweight, easily transportable materials while winter homes, or pit-houses, consisted of excavations of varying width and depth covered with logs, boughs and soil to provide protection from the cold.

Many, if not all, of the major habitat areas throughout the vast Secwépemc territory (180,000 square kilometres covering 10 unique biogeoclimatic zones) (Siska 1988; Skoda 1988) supplied the species of importance to Secwépemc subsistence or other cultural applications. Among the most important zoological species to Secwépemc culture are four species of salmon (Oncorhynchus spp., Salmonidae) that comprise a dietary staple in many areas. Of the 451 fish species that occur in the waters of, or adjacent to, British Columbia (Cannings and Harcombe 1990), at least 30 types (including several species and subspecies) have played some part in the lives of the Secwépemc. Included among these fish are species of suckers (Catostomus spp., Catostomidae).

THE SUCKERS

Suckers are among the most common and widely distributed fishes found in North America. Sixty-three species of suckers assigned to 12 genera are found north of Mexico (i.e., Carpiodes,

Catostomus, Chasmistes, Cycleptus, Deltistes, Erimyzon, Hypentelium, Ictiobus, Minytrema, Moxostoma, Thoburnia, Xyrauchen). Their abundance and, in many cases, large size, causes these fish in many cases to constitute the greatest ichthyological biomass in the streams and lakes they inhabit (Page and Burr 1991). Five members of the sucker family are found in British Columbian fresh water bodies: Catostomus catostomus (Forster) (longnose sucker), C. columbianus (Eigenmann and Eigenmann) (bridgelip sucker), C. commersoni (Lacépède) (white sucker), C. macrocheilus (Girard) (largescale sucker) (Fig. 1), and C. platyrhynchus (Cope) (mountain sucker). All of these species share the common feature of having unique and distinctive sucking mouthparts that at maturity are located at the bottom of, rather than at the end of, their snouts. It is in recognition of this characteristic that the typical suckers are given the generic name Catostomus, literally, 'inferior mouth.'. These ventral mouthparts are evidence of the adaptation of Catostomus spp. as demersal microcarnivores, i.e., fish that graze or browse on benthic invertebrates. These fish vacuum up and ingest a variety of invertebrate species and other materials from lake and stream beds and aquatic vegetation, including crustaceans, insects, molluscs, worms, fish eggs and some detritus or, at least in the case of C.columbianus, algae (Cailliet et al. 1986; Carl et al. 1948; Page and Burr 1991; Scott and Crossman 1973).

All five of the British Columbian species of Catostomus occur within the traditional homelands of the Secwépemc. The most widespread sucker in British Columbia is C. macrocheilus, a species that occurs in many of the waters in the lower two-thirds of British Columbia and is distributed throughout Secwépemc territory. At least three of the four remaining species also occur within this area. Catostomus columbianus and C. platyrhynchus are distributed throughout the Columbia and Fraser river systems. Both species having been recorded from the North Thompson River at Heffley, just north of Kamloops, B.C., but C. platyrhynchus is neither abundant or widely distributed within its range. Catostomus catostomus is likewise found in the Columbia and Fraser river systems, and elsewhere, where it is locally abundant in lakes and streams. The last species, C. commersoni, is, according to Carl et al. (1948) restricted to the northeastern parts of the province, well outside of Secwépemc territory, while Scott and Crossman's (1973) distribution map shows this species as occurring within Secwépemc territory.

Other fish are sometimes referred to as types of "suckers" within Secwépemc territory and adjacent areas, i.e., "redmouth sucker" (or peamouth, Mylocheilus caurinus [Richardson], Cyprinidae) and lake chub (Couesius plumbeus [Agassiz], Cyprinidae).[1] These fish are associated with true suckers in Secwépemc mythology but they are not closely related to Catostomus spp. and, therefore, will not be discussed here. This paper will treat the ethnozoological roles of true sucker species among the Secwépemc, as food and a significant legendary figure whose attributes were relevant not to past Secwépemc generations, but which also pertain to future Secwépemc cultural considerations.

METHODS

Several documents dealing with the Secwépemc and their language were reviewed for information on suckers: Bouchard and Kennedy (1975a, 1975b, 1979);[2] Dawson (1892); Kuipers (1974, 1975); Teit (1909); and Thomas (1991). Specimens of suckers were obtained by a Secwépemc individual, Marge Eugene of Dry Gulch, B.C., from the South Thompson river immediately east of Kamloops, B.C. and provided to Compton as voucher materials. The identities of these specimens were subsequently verified by Bob Carveth (Curator of The Fish Museum, Department of Zoology, The University of British Columbia). One of these specimens was prepared by Compton to obtain a complete set of disarticulated skull bones for examination by Secwépemc elder Mary Thomas, of Salmon Arm, B.C. Additional information on suckers was provided by Secwépemc elder William (Bill) Arnouse of Adams Lake, B.C. Mrs. Eugene, Mrs. Thomas, and Mr. Arnouse are all fluent speakers of Eastern Shuswap as well as English, as is Mr. Joe Michel of Adams Lake, who assisted with ethnozoological elicitation sessions with his uncle, Bill Arnouse.

Additional information regarding the taxonomy, distribution, behavior, and edibility of suckers has been drawn from a number of references (i.e., Cailliet et al. 1986; Carl et al. 1948; Page and Burr 1991; Scott and Crossman 1973; and Smith 1920-1929). Information and illustrations presented by Weisel (1960) have been used to identify the skull bones of suckers as mentioned in Secwépemc mythology. Comparative ethnozoological information on suckers was obtained from Hunn (1980) and Hunn et al. (1990). Latin nomenclature and authority names for fish are presented in accordance with Carl et al. (1948), Page and Burr (1991), or Scott and Crossman (1973) while botanical nomenclature follows that presented by Taylor and MacBryde (1977). Secwepemctsín ichthyological nomenclature is presented in the Shuswap practical orthography, a standardized system of representation adopted for official use by institutions such as the Secwépemc Cultural Education Society in Kamloops, B.C.[3]

RESULTS AND DISCUSSION

The Use of Suckers for Food by the Secwépemc.—Perhaps the earliest written information regarding suckers in Secwépemc culture was the documentation of the Secwepemctsín name for Young Lake—"Ptl-tik-moos'"—said to refer to the "sucker" fish found there (Dawson 1892). Teit (1909) recorded that members of the Green Timber band (one of several now extinct Secwépemc bands) were referred to as the "people of Pelstsokomu's." The name "Pelstsokomu's" was said to refer to a lake near the head of Bonaparte River (approximately 75 kilometres northeast of Kamloops) that served as the location of a winter village where suckers may once have been caught for food. The two lake names given by Dawson and Teit probably refer to the same place, a lake also said by Teit to be the home of five

or more types of fish that were very abundant there. Undoubtedly, in light of the abundance of some species of suckers in some habitats, at least one species of fish referred to by Teit was a sucker.

The place names given by Dawson and Teit are orthographic variants of ‡pelltseq'ʷmús (literally, 'sucker place'). This term is based on the Secwepemctsín name for 'sucker': tseq'ʷmús, literally 'round face' (Kuipers 1974a; cf. Kuipers 1974b). Only Bouchard and Kennedy (1975a) have associated this term (using the equivalent transcription, tsekw'mús) with a specific sucker species, C. catostomus, said to spawn in the Neskainlith area during May and to have been used by the Neskainlith people as food. This identification is based on the comments of Secwépemc consultants from the Neskainlith (also spelled Neskonlith) Indian Reserve near Chase, B.C. (i.e., the late Ike Willard; his wife, Adeline Willard; and her sister, Aimee August). Another sucker species, C. columbianus, is said to have an etymologically unrelated Secwepemctsín name among the Neskainlith people: kəlána (retranscribed in the Shuswap practical orthography as ‡kəléne) (Bouchard and Kennedy 1975a).[4]

Other Interior Salish peoples are known to have differentiated between several types of "suckers." The Colville Okanagan language has several terms for "suckers": kɨxwlx (any sucker, possibly specifically C. macrocheilus, largescale sucker); kw'ekw'ṁús (?C. catostomus); pəpt'ágpu7skɨ́ (?C.columbianus); səseɬ́íẃs (?C.platyrhynchus Cope, mountain sucker); spekáslh (?Catostomus sp.); and sxwiyásulh (?Catostomus sp.) (Bouchard and Kennedy 1975b).[5] In Lillooet, various terms have been identified with suckers: ʕʷoʕʷoɬ and ʕuʕʷɬ ("sucker"), q̓éxaɬ ("largescale sucker"), and q̓ʷ7ék ("bridgelip sucker) (M. D. Kinkade, pers. comm. 1993).

Hunn (1981) and Hunn et al. (1990) have reported that the Sahaptin people of eastern Oregon and Washington differentiate between at least four different suckers—bridgelip sucker (C. columbianus, yáyk in Sahaptin); largescale sucker (C. macrocheilus, x̣ún, x̣úun, x̣ʷń and x̣ʷún); Lost River sucker (Deltistes luxatus [cited as C. luxatus by Hunn], č'wám, c'wám); and "Klamath sucker" (identified only as [wss: ćwəm]). In comparison, Secwepemctsín and Nlakapamuxcín seem depauperate in sucker nomenclature. Nlakapamuxcín has possibly only one documented sucker term: c'əq'ʷ-m-ús (M. D. Kinkade, pers. comm. 1993) and Secwepemctsín lacks evidence of a degree of nomenclatural elaboration comparable to that among Lillooet, Okanagan, and Sahaptin. It is possible that the Secwépemc may have forgotten individual names for the different sucker species in their territory (with the exception of the possibly idiolectal or borrowed term, ‡kəléne). However, it seems more likely that tseq'ʷmús is representative of a typical folk generic level taxon whose membership includes several species in the same genus (Berlin 1992)—in this case, any species of Catostomus that a Secwépemc would likely encounter.

To the north of Secwépemc territory, the Carrier (an Athabaskan group) recognized and named several species of suckers, probably including the three species known to occur within Carrier country (C. catostomus, C. commersoni, and C. macrocheilus) (cf. Morice 1932 and Smith 1920-1929).

Comparative data regarding the edibility of suckers is minimal but Scott and Crossman (1973) have offered the comments that C. columbianus "is edible and may have constituted food for native peoples"; C. catostomus has flesh that is "firm, white, flaky, and sweet" and "more palatable than that of white suckers [C. commersoni]"; C. macrocheilus has flesh that is "firm, white, flaky, and edible but bony and not highly favoured" that "undoubtedly served as food for interior British Columbian Indians and their dogs"; and C. platyrhynchus, although edible, was unlikely used as food because of its scarcity and small size. According to the comments of Scott and Crossman (1973), C. commersoni is the most palatable of all the British Columbian suckers. Weisel (1952b) reported that the Flathead used suckers (C. catostomus and C. macrocheilus), Columbia squawfish (Ptychocheilus oregonense), and Columbia River chub (Mylocheilus caurinum) for food, frying them or roasting them on a willow skewer over an open fire.[6] Several species of suckers also were used for food among Carrier groups such as the Ulkatcho Carrier. These people speared suckers or caught them in gill nets and basket traps, especially during the "May moon" when they spawned in creeks leading to or from the lakes they inhabited. Once they were obtained, suckers (especially C. catostomus) were roasted or boiled in pails made of birch bark (Betula papyrifera Marshall var. papyrifera [common paper birch] or B. papyrifera var. subcordata [Rydberg] Sargent [Pacific paper birch]) (Smith 1920-1929).

Catostomus columbianus was said among the Neskainlith people to have been given to sick people to eat because of the high fat content of this fish (Bouchard and Kennedy 1975a). According to William Arnouse, suckers are good for sick people to eat, especially for upset stomach from, for example, influenza. The Neskainlith people forbade their children from eating suckers (likely C. catostomus and, perhaps in lesser quantities, C. macrocheilus) because their flesh is extremely bony (Bouchard and Kennedy 1975a). Mary Thomas has also indicated that smoked suckers were eaten by the Neskainlith people. The fish were cleaned and a strip of flesh was cut from inside the length of the body and hung to smoke-dry. Mary Thomas' grandmother also used to boil suckers to eat.[7] As the sucker was eaten by elders such as Mary Thomas' grandmother, several bones from the head and body of the sucker were produced and discussed with whatever children and young people were present.[8]

Catostomid Osteology from a Secwépemc Perspective.--The skulls of bony fishes (Class Osteichthyes) consist of a number of bones of varying size, shape and arrangement (Cailliet et al. 1986). A typical teleost (bony fish) skull, or syncranium, consists of two basic divisions: the neurocranium (or braincase) and the branchiocranium (comprised of the mandibular elements and associated structures), each of these divisions consisting of numerous component bones (Gregory 1959). In suckers skull ossification is incomplete so that in mature suckers some of the skull remains

cartilaginous while other elements that are bony do not fuse completely with adjacent elements (for details see Weisel [1960]).

It is the unique osteocranium, or skull of the sucker that has inspired Secwépemc story tellers to create and repeat a myth now referred to as "The Legend of the Sucker." The basic elements of this myth appear in a videotaped account (Thomas 1991). According to Mary Thomas, in the beginning of the world when all the animals were created, the sucker was a handsome and talented fish. Unfortunately, his good looks and exceptional swimming abilities were matched only by his egotistical attitude; he thought he was better and "higher" than everyone else. One day when he was swimming and showing off to anyone who could see him, he noticed an object that he did not recognized up in the sky: the moon. At once the sucker said, "What is that thing doing up there? I thought I was higher than everything." In a matter of moments sucker decided to leap over the moon to re-establish his reputation as the best and "highest" creature in all of creation.

After he failed in three attempts to leap over the moon the sucker tried a fourth time. When he did, he misjudged the spot at which he would land and came crashing down outside of the water, landing on top of a pile of rocks. This caused his body to be badly broken and dismembered. Eventually, one by one, several animal people came along and saw the sucker's predicament. At his request, each of the animal people helped to put the sucker back together again. Eventually sucker was reassembled but, as punishment for his pride, he was made to live where humans would not see him—at the bottom of lakes—and to eat only moss in the mud.

Different Secwépemc storytellers may present slightly different versions of the sucker story. For example, one Secwépemc story, "How fish came down from the upper world," mentions the sucker as only one of several fish who descended to earth from the "upper world" (Bouchard and Kennedy 1979). In that story "Sucker Fish" was damaged after jumping to Earth and was rebuilt from the bones of a loon and a "small diving duck" (horned grebe), and from a fish weir, a fish net, and a young girl. A similar, but earlier documented Secwépemc story entitled "The War with the Sky People" (Teit 1909), also indicates a division between the lower world and the upper world, from which fish descend. According to this story:

> ...the fishes, who tried to throw themselves into a large lake, were wounded. In their fall some missed the lake and dropped on rocks. Thus the skull of the semətsə́ɣ [an unidentified fish][9] came to be flattened, the kwə́ɣak [i.e., qʷe7k, Couesius plumbeus] broke its jaw, the tcoktcí'tcin [i.e., tseqʷtsítsən, Mylocheilus caurinus][10] got a bloody mouth, and the sucker [Catostomus sp.] had all its bones scattered and broken, so that it died.[11] The grandson of a man called Tceɬ gathered the bones, put them back into the body, and revived it. This is the reason why the

> sucker has now so many bones scattered through its flesh, why the semətsə́ɣ has a flat head, the tcoktcí'tcin a red mouth, and why the mouth of the kwə́ɣak appears to be broken.[12]

Mary Thomas' version of the sucker legend makes no mention of many of the entities included in the sucker stories recorded by Teit, and Bouchard and Kennedy but it elaborates more fully on the various animal people who come to the sucker's aid.[13]

Because of the circumstances of the sucker's re-assembly, this fish carries with it a skeletal legacy representing the animal people who helped him and, in some cases, the items they used to reconstruct him. In the videotape recording of the sucker legend (Thomas 1991) only four animals were mentioned (coyote, moose, "fish hawk," and "mountain sheep").[14] Later, when Mary Thomas was able to examine a complete set of the osteocranial elements of C. macrocheilus, she was able to add several animals to the list of sucker's helpers and to associate each of these helpers with the bones that represent the "spitting image" of these animals. Based on ethnozoological work with Secwépemc elder William Arnouse and his nephew Joe Michel (Compton et al. 1993), the biological identities of the sucker's helpers are known: "clam," sełʔéxwɛ7 (Margaritifera falcata [Gould], western-river pearl mussel, and/or Anodonta spp., floaters, Margarifieridae); common loon, ʃswell (Gavia immer [Brünnich], Gaviidae); horned grebe or "diver duck," ts'ółlɣe (Podiceps auritus [Linnaeus], Podicipedidae); osprey or "fish hawk" (with a basket), tsʃcwts'ɛcw (Pandion haliaetus [Linnaeus], Accipitridae); American coot, steɬʃqxe (Fulica americana Gmelin, Rallidae), also referred to as s7éstcʷu, "duck (in general)"; coyote, senxwúxwlɛcw (Canis latrans Say, Canidae); badger, sq'ʃtxlɛqs (Taxidea taxus [Schreber], Mustelidae); mountain goat, scwetʔéɣ (Oreamnos americanus [Blainville], Bovidae); and moose, ɬwɛlɛ́ps tɛ tenʃɣe (literally, 'antlers of moose') (Alces alces [Linnaeus], Cervidae).

The various sucker bone animals of Secwépemc mythology correspond in some cases to individual bones of the sucker and in others to groups of fused bones. The osteocranial counterparts to the sucker's helpers are listed here with the terms and abbreviations as presented by Weisel (1960) in reference to the osteocranium of C. macrocheilus: "clam" (subopercular [SOP]) (Fig. 2); osprey or "fish hawk" with a basket (several fused bones, i.e., pharyngeal process of basioccipital [PPBO], basioccipital [BO], proatlas [CPRA], exoccipital [EO], opisthotic [OPIS], supraoccipital [SOC], post-temporal [PTT], epiotic [EPO], supratemporal [ST], parietal [PA], and intramembranous spine of supraoccipital [DSOC]) (Fig. 3); "coot's feet" (or "duck's feet") (preopercular [POP]) (Fig. 4); "coyote" (unidentified);[15] "badger" (parasphenoid [PS]) (Fig. 5); "mountain goat" (opercular [OP, paired]) (Fig. 6); and "horns [antlers] of moose" (dentary [D, paired]) (Fig. 7). Mary Thomas stated that an additional bone (the urohyal [URH]) (Fig. 8) represented another animal whose identity she

could not recall. Other animal people helpers mentioned in the story recorded by Bouchard and Kennedy (1979), i.e., "loon" and "diver duck," were not associated by Mary Thomas with any sucker bones.

Additional bones were associated by the Secwépemc with other entities. Suckers lack teeth on their jaws instead having pharyngeal teeth in rows along the pharyngeal bones of the hyobranchial apparatus (PH, paired) (Gregory 1959; Weisel 1960, 1967). These teeth (referred to in Secwepemctsín as ‡xəlxlélcw, 'teeth') are numerous (45-55 teeth on each of the paired pharyngeal bones) and of varying size (Fig. 9). The middle teeth have rounded tips that are black and bear small, sharp spines (Weisel 1960, 1967). The Secwépemc believe that if one finds many black teeth in a sucker it means that saskatoon berries (‡spəqpéq, Amelanchier alnifolia Nuttall, Rosaceae) will be plentiful in the upcoming berry season.

In the sucker legend the sticks from a fish weir (‡ts'əlmín)[16] used to guide trout (písəll) into a conical fish trap were used to help rebuild the sucker's body. The y-shaped bones that represent these weir sticks are probably the ribs and intermuscular bones associated with the abdominal vertebrae (cf. Cailliet et al. 1986). The sucker's "ribs" (probably the hemal spines associated with the caudal vertebrae, cf. Cailliet et al. 1986) were rebuilt by the animal people from the elements of a conical trout trap (called mu7). In Ike Willard's story about fish, the sucker's was wrapped with a fish net and a young girl was placed in the top of the sucker's head (Bouchard and Kennedy 1979). His mouth was replaced with the mouth of an unspecified fish (op. cit.) or the anus of an unspecified animal, according to Mary Thomas. One or more additional animals were associated with other bones from the sucker's skull by the ancestral Secwépemc although the bones and the animals they were considered to represent have now been forgotten.

The Secwépemc are not the only British Columbian First Nations group to have told stories about suckers. The Carrier, whose traditional territory lies northwest of and adjacent to Secwépemc territory, also had a sucker myth. According to Necoslie Carrier elder Francesca Antoine, the Carrier once had names for all of the bones in the heads of the "grey suckers" (C. catostomus) used by the Carrier for food. South of Secwépemc territory, the Colville Okanagan people of Washington and the Sahaptin people of Washington and Oregon held similar beliefs about suckers—that their heads contain bones representative of various natural or supernatural entities, some or all of whom helped to reconstruct the broken sucker (Bouchard and Kennedy 1975b; Hunn 1980; Hunn et al. 1990). Like the Secwépemc the Colville Okanagan and Sahaptin are Plateau peoples but their mythological accounts of suckers differ from that of the Secwépemc in terms of many of the zoological and osteological associations (see Table 1)[17]

SUMMARY AND CONCLUSIONS

The personification of sucker in Secwépemc mythology is an expression of the traditional belief among the Secwépemc (and other First Nations groups in British Columbia and elsewhere) that humans and animals are comparable in their mental and behavioral characteristics (cf. Collins 1952). The personal traits ascribed to the mythical sucker following its encounter with a rocky shore derive from the ignoble nature of actual suckers who seem today to inhabit a lower position than other fish and animals. The conversion in mythology of sucker from an egocentric boor to a more humble creature is meant to serve at one level as a morality lesson, particularly in the manner in which Mary Thomas presents the story. In this way, the story demonstrates the value of learning and practicing the concepts of respect, honor, and humility, admirable personality traits that are the frequent focus of the teachings of Secwépemc elders.

On another level the story may serve an additional pedagogical purpose—to acquaint children with various aspects of the natural history and osteology of suckers and to provide a brief lesson in Secwepemctsín zoological nomenclature. Although Secwepemctsín possesses a meager repertoire of sucker names, Secwépemc sucker folklore is replete with terms of the entities and objects associated with sucker bones.

It is not surprising that different Secwépemc storytellers tell different versions of the sucker story. Storytelling, particularly in nonliterate societies, relies in part on the conformity of storytellers to employ culturally standardized story elements. Notwithstanding this basic feature of cultures with a rich oral heritage, contemporary storytellers do not necessarily feel constrained in their explanation of the fundamental concepts to be associated with the sucker story. Joe Michel's telling of this story, for example, emphasizes the metaphorical connection between the fractured sucker and contemporary Secwépemc culture which has likewise become fragmented, but through historical depopulation, First Nations language loss, and acculturation. Mr. Michel's reinterpretation of the legend of sucker sends an optimistic message to Secwépemc of all ages regarding the restoration of their culture. This is evidence not only of the continuing creative enterprise involved in Secwépemc storytelling but of the enduring value of the sucker not only as an element of mythology, but also as a modest yet meaningful cultural symbol.

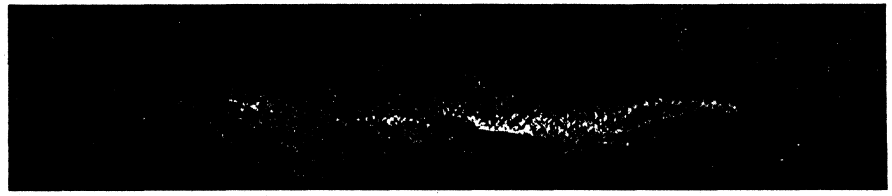

Fig. 1. Largescale sucker (Catostomus macrocheilus), as rebuilt by the Secwépemc animal people helpers.

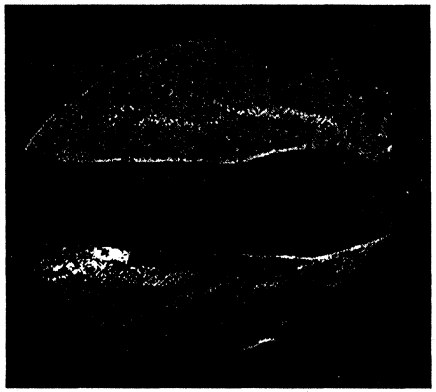

Fig. 2. "Clam."

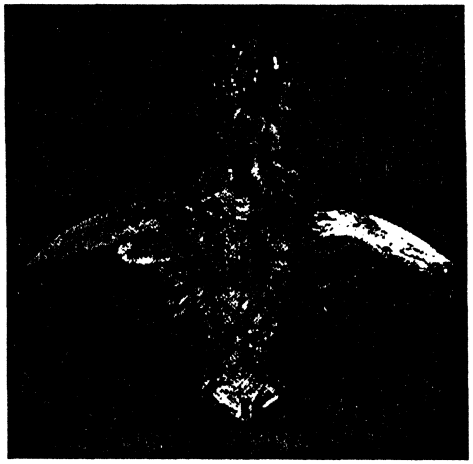

Fig. 3. "Osprey."

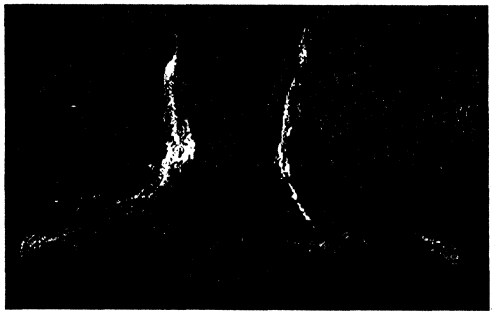

Fig. 4. "Coot's/duck's feet."

Fig. 5. "Badger."

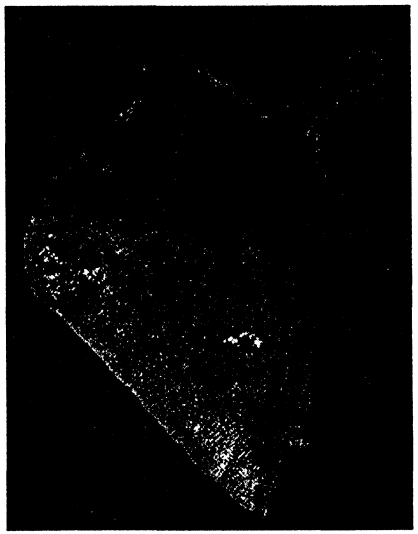

Fig. 6. "Mountain goat."

Fig. 7. "Horns (antlers) of moose."

Fig. 8. Unidentified animal.

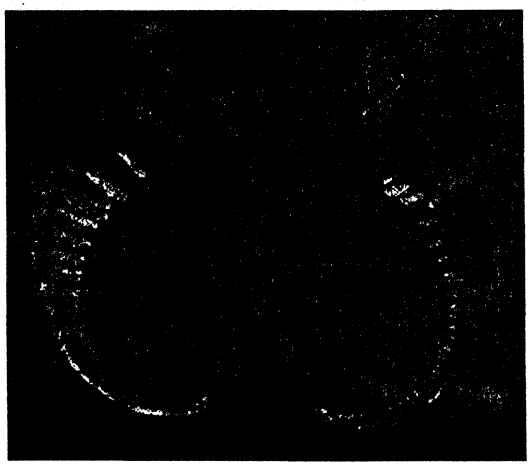

Fig. 9. Sucker's "teeth."

Fig. 4 (preopercular [POP] of skull; see Weisel 1960, Fig. 1)	duck's/coot's foot (s7éstc̓ʷu = duck [general term]; steɬíqxe = American coot) (MT)	(no Colville Okanagan data)	raven's feet	frog feet (dulkw'ah 'uke)
Fig. 5 (parasphenoid [PS], and, in the case of the Sahaptin and Colville Okanagan data, possibly also supraethmoid [SE] and fused prefrontal-lateral ethmoid [PF-LE]; see Weisel 1960, Figs. 3 and 4)	badger (sq'ítxteqs) (MT)	Coyote's daughter-in-law (who was carrying a baby on her back)	cricket packing her child	"badger? (wolverine)" (noostel)
Fig. 6 (opercular [OP, paired] of skull; see Weisel 1960, Fig. 1)	mountain goat (scwetéy) (MT)	(no Colville Okanagan data)	grizzly's earring	(no Carrier data)
Fig. 7 (dentary [D, paired]; see Weisel 1960, Figs. 1 and 8; or possibly autopalatine [P, paired] of neurocranium; see Weisel 1960, Fig. 4)	moose "horns" (antlers) (‡welɬps t'e teníye) (MT)	moose (gave horns)	(no Sahaptin data)	moose "horns" (antlers) (dunt 'ude
Fig. 8 (urohyal [URH] of hyobranchial apparatus; see Weisel 1960, Fig. 7)	unidentified animal (identity not recalled by MT)	(no Colville Okanagan data)	(no Sahaptin data)	unidentified insect (Carrier name not recalled)
Fig. 9 (pharyngeal [PH, paired] bones of hyobranchial apparatus; see Weisel 1960, Fig. 7)	teeth (‡xelxlélcw) (MT)	(no Colville Okanagan data)	(no Sahaptin data)	sawbill teeth (delghaz 'ughoo)

Table 1.—Sucker Bone (Catostomus spp.) Names in Secwepemctsín, Colville Okanagan, Sahaptin and Carrier.
(Terms for which the transcriptions presented here have not been verified are preceded by a diesis, "‡")

Bone Type (identified, where possible, using terminology from Weisel 1960)	Secwepemctsín Name for Sucker Bones (C. catostomus and C. macrocheilus; data provided by Mary Thomas [MT] or cited from Bouchard and Kennedy 1975a and 1979 [B&K75a, 79])	Okanagan Name for Sucker Bones (data cited from B&K75b) (Note: These terms are placed adjacent to the other columns where the Colville Okanagan terms seem comparable to the adjacent Secwepemctsín or Sahaptin terms.)	Sahaptin Name (Umatilla dialect) for Sucker Bones (C. columbianus; data cited from Hunn 1980 and Hunn et al. 1990)	Carrier Name for Sucker Bones (data provided by Francesca Antoine)
Fig. 2 (subopercular [SOP]; see Weisel 1960, Fig. 1)	clam shell (setyéxwe7) (MT)	(no Colville Okanagan data)	(no Sahaptin data)	hide scraper ('ingwulh)
Fig. 3 (pharyngeal process of basioccipital [PPBO], basioccipital [BO], proatlas [CPRA], exoccipital [EO], opisthotic [OPIS], supraoccipital [SOC], post-temporal [PTT], epiotic [EPO], supratemporal [ST], parietal [PA], intramembranous spine of supraoccipital [DSOC]; see Weisel 1960, Figs. 2, 3, 4, and 5)	osprey (tsícwts'ecw) (MT)	osprey	bison's skull	dragonfly (‡nak'aten)

unidentified skull bone	(no Secwépemc data)	(no Colville Okanagan data)	(no Sahaptin data)	butterfly (tsəngwelht'əh)
unidentified skull bone	(no Secwépemc data)	(no Colville Okanagan data)	(no Sahaptin data)	pink (or humpback) salmon (Carrier name not recalled)[18]
unidentified skull bone	(no Secwépemc data)	(no Colville Okanagan data)	(no Sahaptin data)	gaff hook for salmon (‡də soh)

unidentified skullbone (Note: The osteological identity of this bone could not be ascertained based on comparison with illustrations in Hunn 1980, Hunn et al. 1990, and Weisel 1960.)	coyote (senxwúxwlecw) (Note: This bone said by MT to be missing from the voucher materials, but her description seems to match the Sahaptin "soft-basket woman monster" bone.)	coyote	soft-basket woman monster	(no Carrier data)
"y-shaped bones" along lower side of sucker (probably ribs and intermuscular bones associated with abdominal vertebrae) (see Cailliet et al. 1986)	fish weir used to guide trout (or other fish) into cylindrical trap (MT; B&K75a, 79)	(no Colville Okanagan data)	(no Sahaptin data)	(no Carrier data)
"ribs" (probably the hemal spines associated with caudal vertebrae) (see Cailliet et al. 1986)	cylindrical fish trap (MT)	(no Colville Okanagan data)	(no Sahaptin data)	(no Carrier data)
(mouth)	mouth (an unspecified animal's anus) (MT)	(no Colville Okanagan data)	(no Sahaptin data)	(no Carrier data)
(skin)	fish net (type unspecified) (MT; B&K75a, 79)	(no Colville Okanagan data)	(no Sahaptin data)	(no Carrier data)
unidentified skull bone (used to repair sucker's body)	"diver duck" (ts'ółłye) (B&K75a, 79)	(no Colville Okanagan data)	(no Sahaptin data)	(no Carrier data)
unidentified skull bone (used to repair sucker's body)	loon (ʃswell) (B&K75a, 79)	(no Colville Okanagan data)	(no Sahaptin data)	(no Carrier data)
unidentified skull bone (placed in the top of sucker's head)	Secwépemc "young maiden" or "young girl" (B&K75a, 79)	Suckerfish's sister-in-law (in Sucker's tail)	(no Sahaptin data)	(no Carrier data)
unidentified skull bone	(no Secwépemc data)	(no Colville Okanagan data)	(no Sahaptin data)	ice paddle.(‡tunchus)

NOTES

[1]The late Mr. Leslie Jules of Kamloops, for example, would begin a discussion of suckers by stating that there are two kinds of suckers: tseq'ʷmús (Catostomus) and tseqʷtsítsɛn (M. caurinus). Other Secwépemc individuals elsewhere, such as Mr. Joe Fortier of Chu Chua, also regard M. caurinus as a "kind of sucker," apparently because M. caurinus and Catostomus spp. are very bony and are used in a similar way today, for bait when trapping for fur-bearing animals. In comparison, at least four "suckers" were said by Smith (1920-1929) to have been recognized by the Ulkatcho Carrier yet only three species of Catostomus occur in their territory. Morice (1932) further confused the situation regarding Carrier recognition of suckers by referring to any catostomid or similar fish as a "carp" of which, according to Morice, there are seven known to the Carrier. It should be noted, however, that earlier authors (e.g., Richardson 1836) have referred to true suckers as "sucking-carps."

[2]The first two of these sources are unpublished manuscripts prepared by Randy Bouchard and Dorothy Kennedy of the British Columbia Indian Language Project, Victoria, B.C. The original documents are on file at this research organization.

[3]The phonemic inventory used in the transcription of Shuswap words is as follows: plain and ejective stops and affricates—/p t k kʷ q qʷ ʔ p' k' k'ʷ q' q'ʷ c c' x̌/; a fricative series with the voiced fricatives being plain or glottalized—/s ɬ x xʷ χ χʷ h ʁ ʕ ʕˤ ʕʷ ɬʷ/; plain and glottalized resonants—/m m̓ n n̓ l l̓ y y̓ w w̓/; vowels—/i ɐ ə ɔ u/. Stress is indicated by the use of the acute (´) over a vowel. In the Shuswap Practical Orthography the following transcriptional elements are used in place of the phonetic symbols presented above (with the phonetic symbols in parentheses following each corresponding practical orthographic symbol): 7 (/ʔ/), ts (/c/), ts' (/c'/), t' (/x̌/), ll (/ɬ/), c (/x/), cʷ (/xʷ/), x (/χ/), xʷ (/χʷ/), r (/ʁ/), r̓ (/ʁ̓/), g (/ʕ/), gʷ (/ʕʷ/), g̓ʷ (/ʕ̓ʷ/), and o (/ɔ/). Secwepemctsín terms whose transcriptions have not been verified by a linguist or which were not attested to by contemporary consultants are indicated by a diesis, or double dagger (‡), preceding the First Nations term. Other First Nations terms are presented here in the form in which they originally appeared. The reader is referred to the source(s) of these (or other linguistic) data for explanatory information regarding their orthographic characteristics. Single quotation marks are used to denote literal translations of First Nations terms. Double quotation marks indicate approximate English glosses.

[4]Bouchard and Kennedy further indicated that only Aimee August used this term. The form recorded by Bouchard and Kennedy likely represents a borrowing from another Salish language for this, or another, "sucker" species. For example, similar "sucker" terms are known in Spokane (člénaʔ) and Flathead (člénaʔ, čilléneʔ, čeʼlēnē, chiléné, chilene, and tcɪénɛ) (M.D. Kinkade, pers. comm. 1993). Weisel

(1952b) has identified the fish known among the Flathead by the name čeʼlēnē as C. catostomus and C. macrocheilus.

[5]Mattina (1987) reported the terms qix̌ʷlx, s-sr̓iẇs, and spq̓ʷllc as names for various biologically unidentified "sucker fish." These terms seem to correspond to the terms kixwlx, seser̓íẇs, and spekéslh reported by Bouchard and Kennedy (1975b).

[6]The fish identified by Weisel as Columbia River chub (Mylocheilus caurinum) is identified elsewhere in this paper as peamouth (Mylocheilus caurinus).

[7]Additional information on the use of suckers as food by Salishan groups is minimal but Teit (1930) reported that the Coeur D'Alêne of Idaho and Washington used large bag nets with long handles to catch a type of "sucker" that was present at the surface of lakes during calm, warm weather.

[8]An additional Secwepemctsín term—q'úne—refers to "soup made of sucker eggs with stséq̓ʷem [saskatoon, Amelanchier alnifolia Nuttall, Rosaceae] berries" (Kuipers 1974a:48) indicating that suckers were used in at least one other traditional culinary application.

[9]The zoological identity of the sɛmatsaʼ ɪ is unknown and the term recorded by Teit has not been verified by contemporary speakers of Secwepemctsín. An apparent Nlakamapmuxcín (Thompson Indian language) cognate—Sɛmatsaʼz—was said to refer to the ichthyological "captain" to the "chief" of the interior fishes, "Rainbow Trout (Sɛmaʼɛsuɬ)" in the Nlakápamux story of the "War between the Fishes of the Interior and of the Coast." This "captain" was a fish "who could swallow water so quickly as to dry up a river in a short time" (Teit 1912). Kuipers (1974a) has recorded the Enderby Secwepemctsín term semyúy7ə—possibly derived from the same root as sematsaʼ ɪ—for a small unidentified fish.

[10]Mylocheilus caurinus is brightly colored, with red patches at the corners of the mouth, and sometimes extending farther along the head and body (Scott and Crossman 1973).

[11]A Flathead myth tells that in mythical times squawfish, rather than sucker, fell so hard from sky that his bones were splintered when he hit the earth, this being the reason why squawfish are so bony today (Weisel n.d.).

[12]The idea that the mouth of the kwaʼak appears broken may stem from the fact that the snout of Couesius plumbeus projects slightly beyond it's upper lip, especially so in eastern Canadian populations (Scott and Crossman 1973).

[13]Teit (1909) wrote that one Secwépemc individual told him that "The fullest versions of some stories were only known by certain individuals." Teit also recorded another story, "The Mammals Steal Fires from the Fishes," in which sucker is mentioned in association with Couesius plumbeus, Mylocheilus caurinus, and mountain whitefish (Prosopium williamsoni [Girard], Salmonidae).

[14]Mary Thomas later confirmed that this animal is actually mountain goat, rather than mountain sheep.

[15]In Secwépemc mythology (and in reality) Coyote is somewhat mischievous and elusive. True to his nature, Coyote (or, at least the sucker bone said to represent Coyote), remained elusive during the research leading up to the presentation of this paper; no bone representing Coyote was identified by Mary Thomas in the set of (what I believed to be) a complete set of sucker skull bones.

[16]The term given by Mary Thomas—‡ts'elmín—to refer to the weir used to guide trout or other fish into the conical fish trap called mu7 is said by Bouchard and Kennedy (1975a:14) to be a type of fish catching device not used in conjunction with the mu7. According to Bouchard and Kennedy (op. cit.) the V-shaped weir used to guide fish into the mu7 is called k'exk'ícsatn (retranscribed in the Shuswap practical orthography as k'eck'ícsatn).

[17]A portion of an unrelated Flathead tale entitled "Acida" is illustrated with the parasphenoid bone—said to resemble a canoe with a man sitting in it—of an unidentified fish (Weisel 1952a).

[18]It is currently unclear whether or not any Carrier word for pink or humpback salmon (Oncorhynchus gorbuscha [Walbaum]) exists. Morice (1932, Volume 1:15) recorded stem·oñ (which he suggested may be a loan word) for "hump-back salmon." This seems to be a Tsimshianic, rather than an Athabascan, word as Dunn (1978:92) has recorded sti'moon for this species. Other reports of Carrier humpback names suggest borrowings from Nuxalk (Nater 1977:41; Smith 1920-1929:137).

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LITERATURE CITED

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

BOUCHARD, R AND D.I.D. KENNEDY. 1975a. Utilization of Fish by the Chase Shuswap Indian People of British Columbia. Unpublished manuscript. British Columbia Indian Language Project, Victoria, British Columbia.

_____ and _____. 1975b. Utilization of Fish by the Colville Okanagan Indian People. Unpublished manuscript. British Columbia Indian Language Project, Victoria, British Columbia.

_____ and _____ (eds.) 1979. Shuswap Stories. CommCept Publishing Ltd., Vancouver, British Columbia.

CAILLIET, G.M., M.S. LOVE, AND A.W. EBELING. 1986. Fishes: A Field and laboratory Manual on Their Structure, Identification, and Natural History. Wadsworth Publishing Company, Belmont, California.

CANNINGS, R.A. AND A.P HARCOMBE (EDS.) 1990. 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.

CARL, G.C., W.A. CLEMENS AND C.C. LINDSEY. 1948. The Fresh-water Fishes of British Columbia. Handbook No. 5. British Columbia Provincial Museum, Victoria.

COLLINS, J.M.. 1952. The Mythological Basis for Attitudes Toward Animals Among Salish-Speaking Indians. Journal of American Folklore 65:353-359.

COMPTON, B.D., D. GARDINER, J. MICHEL AND W.A. ARNOUSE. 1993. An Idiolectal Secwepemctsín Ethnozoological Database. Pp. 27-77 in: Collected Papers of the 28th International Conference on Salish and Neighbouring Languages held 19-21 August 1993 at the University of Washington, Seattle.

DAWSON, G.M. 1892. Notes on the Shuswap People of British Columbia. Transactions of the Royal Society of Canada for the year 1891, Volume IX, Section II, Part I, pp. 3-44.

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.

GREGORY, W.K. 1959. Fish Skulls: A Study of the Evolution of Natural Mechanisms. Eric Lundberg, Laurel, Florida. (originally published in the transactions of the American Philosophical Society, Vol. 23, Part 2, 1933.)

HUNN, E. 1980. Sahaptin Fish Classification. Northwest Anthropological Research Notes 14(1):1-19.

_____ with J. Selam and Family. 1990. Nch'i-wána, "The Big River": Mid-Columbia Indians and Their Land. University of Washington Press, Seattle, Washington.

KUIPERS, A.H. 1974a. Shuswap English Dictionary. Leiden, Holland.

_____. 1974b. The Shuswap Language. Grammar, Texts, Dictionary. Mouton, The Hague, Netherlands.

MATTINA, A. 1987. Colville-Okanagan Dictionary. Occasional Papers in Linguistics, No. 5. Department of Anthropology. University of Montana, Missoula.

MORICE, FATHER A.G. 1932. The Carrier Language (Déné Family) (2 Vols.). Anthropos, St.-Gabriel-Mödling, Austria.

NATER, H.F. 1977. Stem List of the Bella Coola Language. The Peter De Ridder Press, Lisse, Netherlands.

PAGE, L.M. AND B.M. BURR. 1991. A Field Guide to Freshwater Fishes of North America North of Mexico. Houghton Mifflin Company, Boston, Massachusetts.

RICHARDSON, J. 1836. Fauna Boreali-Americana (Volume 3). Richard Bentley, London.

SCOTT, W.B. AND E.J. CROSSMAN. 1973. Freshwater Fishes of Canada. Bulletin 184, Fisheries Research Board of Canada, Ottawa, Ontario.

SISKA, H.S. 1988. We Are the Shuswap. Secwepemc Cultural Education Society, Kamloops, British Columbia.

SKODA, L. (design cartographer). 1988. Biogeoclimatic Zones of British Columbia. 1:2,000,000 scale map. Ministry of Forests, Victoria, British Columbia.

SMITH, H.I. 1920-1929. The Uses of Mammals, Fish and Shellfish by the Carrier Indians of British Columbia. Unpublished manuscript. National Museum of Canada, Ottawa. (Manuscript VI-B-31M [B87 F10] on file at The Canadian Museum of Civilization, Hull, Québec.)

TAYLOR, R.L. AND B. MACBRYDE. 1977. Vascular Plants of British Columbia. The University of British Columbia Press, Vancouver.

TEIT, J.A. 1909. The Shuswap. The Jesup North Pacific Expedition (ed. by Franz Boas), Vol. II, Pt. VII (pp. 443-789). Memoir of the American Museum of Natural History, New York. G.E. Stechert, New York.

_____. 1912. Mythology of the Thompson Indians. The Jesup North Pacific Expedition, Memoir of the American Museum of Natural History, New York, Volume 8, Part 2. G.E. Stechert, New York. (1975 reprint by AMS Press, Inc., New York)

_____. 1930. The Salishan Tribes of the Western Plateaus. Bureau of American Ethnology, Forty-fifth Annual Report, 1927-1928 (pp. 25-396). Smithsonian Institution, Washington, D.C.

THOMAS, M. 1991. Legend of the Sucker (videotape recording). Secwépemc Cultural Education Society, Kamloops, British Columbia.

WEISEL, G.F. 1952a. A Flathead Indian Tale. Journal of American Folklore 65:359-360.

_____. 1952b. Animal Names, Anatomical Terms, and Some Ethnozoology of the Flathead Indians. Journal of the Washington Academy of Sciences 42:345-355.

_____. 1960. The Osteocranium of the Catostomid Fish, Catostomus macrocheilus. A Study in Adaptation and Natural Relationship. Journal of Morphology 106(1):109-129.

_____. 1967. The Pharyngeal Teeth of Larval and Juvenile Suckers (Catostomus). Copeia 1:50-54.

_____. (no date) Ten Animal Myths of the Flathead Indians. Anthropology and Sociology Papers, No. 18. Montana State University, Missoula.