

evolute of this grex. In Canada the grex is thus well represented, and only a very few American species are absent.

Considered altogether the genus *Carex* in Canada is rich in types, some being confined to this continent, others being known also from Eurasia. The arctic element Canada shares mostly with Europe, and as stated above several species are circumpolar, and it deserves attention that many of these Canadian *Carexes* represent alliances analogous to those of the old world, exemplified by types of a corresponding habit and general aspect.

So far as concerns the greges we have seen that Canada is the home of certain ancestral types, *formae hebetatae*, which are absent from Europe,

in other words several of the greges are more amply represented here by possessing these types in connection with the *centrales*, and passing gradually into some more or less deviating: *desciscentes*.

The presence in Canada of such characteristic species as those of the *Lejochlaenae*, mostly sylvan types of rare morphological structure, and of southern origin, indicates the enormously wide distribution of the genus on this continent, and its ability to adapt itself to the environment, far north and far south. And the alpine flora with its arctic species intermingled with endemic or more southern types is a tangible proof of the foundation of the theory relating to the history of the arctic flora during the glacial epoch.

HUNTING THE BARREN GROUND GRIZZLY ON THE SHORES OF THE ARCTIC.

By H. F. J. LAMBART, OTTAWA.

One specimen of the Alaska Boundary Grizzly, *Ursus internationalis* Merriam,* a new bear of the Barren Grizzly group, was secured in July, 1912, when engaged on the survey of the 141st meridian. This was the year in which the meridian was completed through to the shores of the Arctic Ocean. Not more than two other specimens were seen by the Canadian and American parties during the summer although signs of the bear were constantly met with.

This one specimen was secured by mere chance. One of our camps was situated in a sheltered valley which later was found to be a favorite haunt as evidenced by the quantity of hair found in the gum of the small spruce against which he was accustomed to rub. This sheltered ravine was at the head of a small stream in which there was a luxuriant shrub growth, consisting of "buck brush" with some small scattered spruce, and was hemmed in by rolling high barren ridges. The elevation of the floor of the valley was about 2,000 feet above sea level and was situated just a little on the

Canadian side of the boundary and inland from the Arctic Ocean 45 miles.

The immediate district may be described as being under the lee of the British mountains, which parallel the coast at a distance of about 25 miles and reach an altitude of 6000 feet at the boundary; the mountains are deeply furrowed, the ridges being bare and open with little vegetation.

The burrows of the Arctic Ground Squirrel, *Citellus parryi* (Richardson), are sadly rooted out throughout the district casting suspicion on our friend the bear.

The floor of the river valleys are, generally speaking, heavily brushed as also the sheltered sides of the valley, and small patches of the small Arctic spruce in these localities are frequent.

I have definitely proved to my own satisfaction that the Brown and Grizzly bears prey upon the sheep (*Ovis dalli*) at the southern end of the boundary where they are found in large numbers, but here at the northern end where the sheep are very

*Alaska Boundary Grizzly. *Ursus internationalis* Merriam, Proc. Biol. Soc. Washington, xxvii, pp. 177-178, August 13, 1914.

Type locality—Alaska—Yukon Boundary, about 50 miles south of Arctic coast (lat. 69° 00' 30").

Type Specimen—No. 1763 ad., Ottawa Museum. Killed July 3, 1912, by Frederick Lambart, of Canadian Boundary Survey.

Range—Region bordering Arctic coast along international boundary, and doubtless adjacent mountains, between the coast and the Yukon—Porcupine; limits unknown.

Characters—Size medium or rather large; affinities doubtful. Color a peculiar pale yellowish brown. Head strongly arched; muzzle and frontal region broad. Large lower premolar strictly conical, without heel, as in the brown bears.

Cranial characters—Skull of medium size, massive, strongly arched and dished, highest over

anterior part of braincase; frontal shield broad, very short pointed posteriorly sulcate medially and swollen over orbits; postorbitals bluntly rounded, strongly decurved, not widely projecting; fronto-nasal region strongly dished; rostrum large and broad; sagittal crest long but feebly developed; zygomata subtriangular, not widely outstanding, and not much expanded vertically; palate and post-palatals rather broad; notch moderate. Teeth rather small for size of skull; heel of last upper molar small and obliquely truncate on outer side; large lower premolar strictly of brown-bear type—a single cone without heel, sulcus, or posterior cusplets; first lower molar broad and somewhat sinuous; middle lower molar narrow and short posteriorly.

Skull measurements.—Adult male (type): Basal length, 309; occipito-nasal length, 293, palatal length, 169, zygomatic breadth, 203.5, interorbital breadth, 82.