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DOMINION.

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report, and the C. N. R. is without these in the East. The Government arrangement will not remedy these conditions to the same extent as if all three roads had been taken over. However, now that a start has been made it is the duty of those in power to so arrange things as to absolutely eliminate all danger of political control or intrigue interfering with this new venture in public ownership, and to see to it that private interests of any class are not allowed to hamper operations so as to show public ownership in a bad light. The people's rights must be safeguarded against partyism and vested interests. A bad start would give Government ownership of railways a permanent black eye. As it is the Canadian people are disappointed that the Government has not seen fit to take over all roads according to the Drayton-Acworth report.

Nature's Diary

A. B. KLUGH, M.A.

This is the year of the "big run" of Sockeye Salmon in the Fraser River, it being a peculiarity of the Fraser that every fourth year, in the year following leap year, the Sockeye ascend in much greater numbers than in the preceding three years.

On the British Columbia coast there are five species of Salmon usually known in that province respectively as the Sockeye, Chinook, Coho, Humpback and Dog, though each species has several other common names. The Chinook and Coho are much esteemed for use in the fresh condition and certain quantities of all species are canned, but the great bulk of the canned salmon consists of Sockeye.

The name Sockeye is undoubtedly a corruption of the Indian name Sauqui. This species weighs from three to ten pounds, though specimens of seventeen pounds in weight are recorded. The average length is two feet. The general appearance of the fish can be seen from the figure. The adult Sockeyes as they occur in the sea are free from spots, the backs are a clear blue and the sides are silver. As they ascend the rivers to spawn their colors change, the upper parts and sides becoming deep carmine, those which ascend the furthest becoming the most highly colored. The color of the flesh is a deep red. The Sockeye spawns only in lakes or in the tributaries of lakes which form the head-waters of rivers running to the sea. Neither the size of the lake, its distance from the sea, nor its altitude are of importance. The fish will force their way through the rapids of the Fraser for hundreds of miles to the snow-

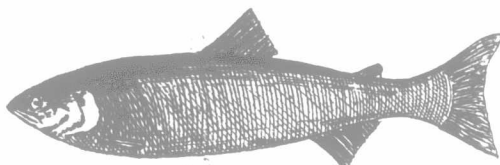
fed lakes at its head, and they likewise ascend the numerous little streams which drain small valleys and low-lying lakes but a few feet above sea-level.

The first Sockeyes enter the Fraser in April, but they do not ascend in large numbers till the latter part of July, and the run is at its height during the first ten days of August.

The spawning period extends from August to November, and after spawning the Sockeyes, like all the species of Pacific Salmon, die. In this respect the Pacific Salmon are entirely unlike the Atlantic Salmon, which lives to return to its spawning grounds again and again for several years.

The eggs are laid on gravel in shallow water and hatch in the fall or during the winter. The young live for a time on the stored food of the yolk-sac and then begin to feed on small crustaceans and aquatic insects. There is a wide variation in the length of time which the young Sockeyes spend in the lakes or streams in which they are hatched, some descending to the sea in their first year, some in their second and some in their third year. The great majority of the Fraser River Sockeyes run to the sea in their second year, thus having spent one full year in fresh water, while in other rivers, such as the Nass, most of the Sockeyes do not descend to the sea until their third year.

After they reach the sea they are completely lost sight of until they again enter the rivers to spawn, and it is supposed that they at once strike for deep water and remain there until mature. The age at which the Sockeye matures varies from three to seven years, the great majority maturing in four years, though in every run there are many five-year fish. From the time that they leave the sea until they spawn and die the Salmon take no food, and they live during this period on the



Sockeye Salmon.

stored fat and oil—upon those materials which make salmon such a rich article of human diet.

Many may wonder how it is possible to tell the age of a fish with accuracy. It is done by counting the rings on the scales, just as the woodsman counts the rings of a tree-trunk and thus ascertains its age. A fish-scale grows throughout the life of the fish, and this growth is marked by little rings. During the summer, when food is plentiful, the rings are comparatively wide apart, and during the winter, when food is scarcer, the rings are much closer together. Thus when examined under a low power of the microscope the areas of close rings show as dark bands and reveal at once through how many winters the fish has passed. The story which is told by the scales is a very important part of modern fishery investigations, as it not only enables us to tell the age of fishes, but also to separate different races of the same species, since some races which frequent certain particularly good feeding grounds make wider bands of "summer rings" than others. The size of the area of rings of the first summer's growth also gives us information as to the available food supply in the waters in which the fish was raised, information which may be extremely valuable in deciding upon locations for hatcheries.

(To be continued.)

Sandy Lectured on Moderation.

BY SANDY FRASER.

"It's a funny thing," says Jean to me the other night, as I was sittin' oot on the verandah takin' a smoke before goin' tae bed, "that people canna' be mair moderate an' canny in their ways than they are. Here's yersel' Sandy, for instance, all played oot wi' warkin' sae hard in the hot sun at the hay. Why dinna' ye tak' things a wee bit easier an' leave pairt o' the work for tomorrow? But no, ye maun be racin' about as though this wis yer last day on earth, an' no preparations made for yer funeral. In a few years frae noo wha will ken the difference whether ye got a' yer hay in before the rain or not? 'Hoot, Jean,' says I, 'what wad ye think o' a mon that wad be sittin' doon for a smoke an' rest in the middle o' the afternoon when he had half a dozen loads ready to gae in, an' it beginnin' tae look like rain?'"

"There ye go," replied Jean, "frae one extreme tae the ither. Juist like a' the rest o' humanity. There may be times when one has tae hurry a wee bit, maybe, but what I object tae, is gettin' the habit. And there doesn't seem tae be onything that mon can't turn intae a habit an' carry too far. This warkin' day an' night, for instance. It wis never intended tae be that way. A little wark is a' richt, an' sae is a guid deal o' sleep. Naebody can do guid wark gin they're short on sleep."

"Weel," says I, "I've known some pretty guid sleepers in my day, an' twa or three o' them landed in the poor-house."

"Na doot," answered Jean, "they were some mair o' yer extremists. Tak' it in ony line ye like, Sandy, ye'll find it warks oot the same way."

"What about eating," says I, juist tae draw her oot.

"Eating is a necessity," she replied, "but the majority o' men turn it into a luxury. The fact that they need a certain amount o' food doesna' cut muckle o' a figure wi' them, but the fact that they want it, is o' vera conseederable importance. An' they're juist as

bad when it comes tae drinkin'. They all think they can tak' a wee drap, juist enough tae mak' them feel sort o' optimistic, ye ken, but first thing they're on their backs in the gutter, maybe; anither object lesson on the result o' gaein' a wee bit too far in one direction."

"Na doot," said I, "there are several ither things that yer rule o' moderation will apply to, that ye hae been thinkin' about. Ye might gie me the benefit o' yer reflections, gin ye dinna' think talkin' can be overdone like everything else."

"Na doot it can," says Jean, "but I've had naebody tae talk to a' day in the hoose, sae ye canna' say I'm an extremist in a conversational way. A' the same I think I've known some that were. There's some preachers I ken, an' maybe ye ken them as weel, that hae the remarkable ability o' talkin' for an hour at a time, maybe, an' when they're done ye canna' say that they've really said onything. An' there's a guid many ither people besides some preachers that talk a lot for naething. I'm no descendin' tae personalities noo," says she.

"Thank you," says I, "gae on wi' yer sermon."

"Weel," she continued, "I ken it's no easy thing tae steer yer course doon the middle o' the road an' no' get intae the ditch on either side, but it's tae learn how tae do that vera thing that we're sent into this auld earth. Sae it will dae us na harm tae gie the maitter some conseederation an' tae tak' a few notes by the way, as tae how the world in general is succeedin' in the task. Tak' for instance the general tendency o' mankind tae be gettin' mair money. A certain amount o' riches is a guid thing to hae, an' vera necessary in a civilized community, but when people get the idea that it is the mair important thing in the world, an' sacrifice health an' happiness an' what little morality they hae, a' for the sake o' a big bank account, then they're on the wrang track, an' it's time that some one hung oot a red flag, gin they're tae be kept frae endin' in a regular smash-up. There's naething mair handy an' useful than the dollar, but when ye get it that close tae yer eye that it shuts oot the sight o' a guid many ither things o' mair value, it's time ye were warned."

"Oh, I guess you're richt, a' richt," says I, "but what about some of the extremes that yer ain sex gae to? Or dae women keep the straight an' narrow way in a' things an' at a' times? Seems tae me there's a lot o' guid money wasted in fancy hats an' dresses by them, gin I'm ony judge."

"Maybe ye're a judge an' maybe not," says Jean, "but I'm willin' tae admit that there's a possibility o' goin' a wee bit too far along the line o' style an' tryin' tae follow the latest fashions at the expense o' comfort an' sometimes even o' respectability. It's na different tae onything else. Ye want tae keep yersel guid an' decent lookin' wi'oot wastin' ower muckle o' yer hard earned money in the attempt. I'm thinkin' that a person should dress sae that they will no' be inclined tae gie the maitter anither thought, once the clothes are on their back. This means that naebody is gaein' tae tak' a second look at ye on account o' the way ye are dressed, an' that is what ony sensible mon or woman wants."

"One thing mair noo, while the spirit is movin' you," says I, as Jean stopped for breath, "gie us yer opinion on the social life o' the mon on the farm. Dae ye think, as a rule, he's wastin' ower muckle o' his time an' money in the theatres an' high-class restaurants o' the country, or is he inclined tae gae tae the ither extreme an' become a sort o' a hermit, wi' few interests an' fewer possibilities."

"Ye're trying tae joke about a serious subject," says Jean, shakin' her heid. "Ye may no' think it, but the social problem on the farm is one that is gettin' harder tae solve ilka day. Scattered communities get the habit o' livin' by themselves, an' first thing they ken they want tae live that way. An' it's no' richt. A man must keep in touch wi' his fellowman gin he's goin' tae keep his mind clear an' active, sae that he may be of some service tae the world in return for his board an' keep. I'm unco' feared too, that things are no' gettin' muckle better along this line at the present time. It seems tae me Sandy," says Jean, "that people dinna' visit around the way they used to when we were young."

"That's what I hae been thinkin' mysel'," says I, "but maybe we carried the thing tae an extreme in those days. Dae ye mind how many guid nights sleep I lost sittin' up wi' ye afore we were married. There wis plenty o' sociability around there in those days."

"Yes," says Jean, "but I dinna' think ye wad need tae call that gaein' tae an extreme. Ye were a kind o' a bashful chap, gin I remember richt."

"A' the same Jean," I said, "I'm thinkin' we should be classed as extremists. We went an' got married d'ye mind," says I.

Where is all this suitable farm help of which the farmer has heard so much from some city organizations and government officials? Some of the latter even expressed themselves as ready to don overalls but, like certain safety-first colonels, they seem to feel better in the attire they are more accustomed to wearing than in any sort of war-service uniform, overalls included.

If leaving second-growth red clover for seed, go through the field and pull any weeds which might be there. They are more easily separated from the clover in the field than after threshing.