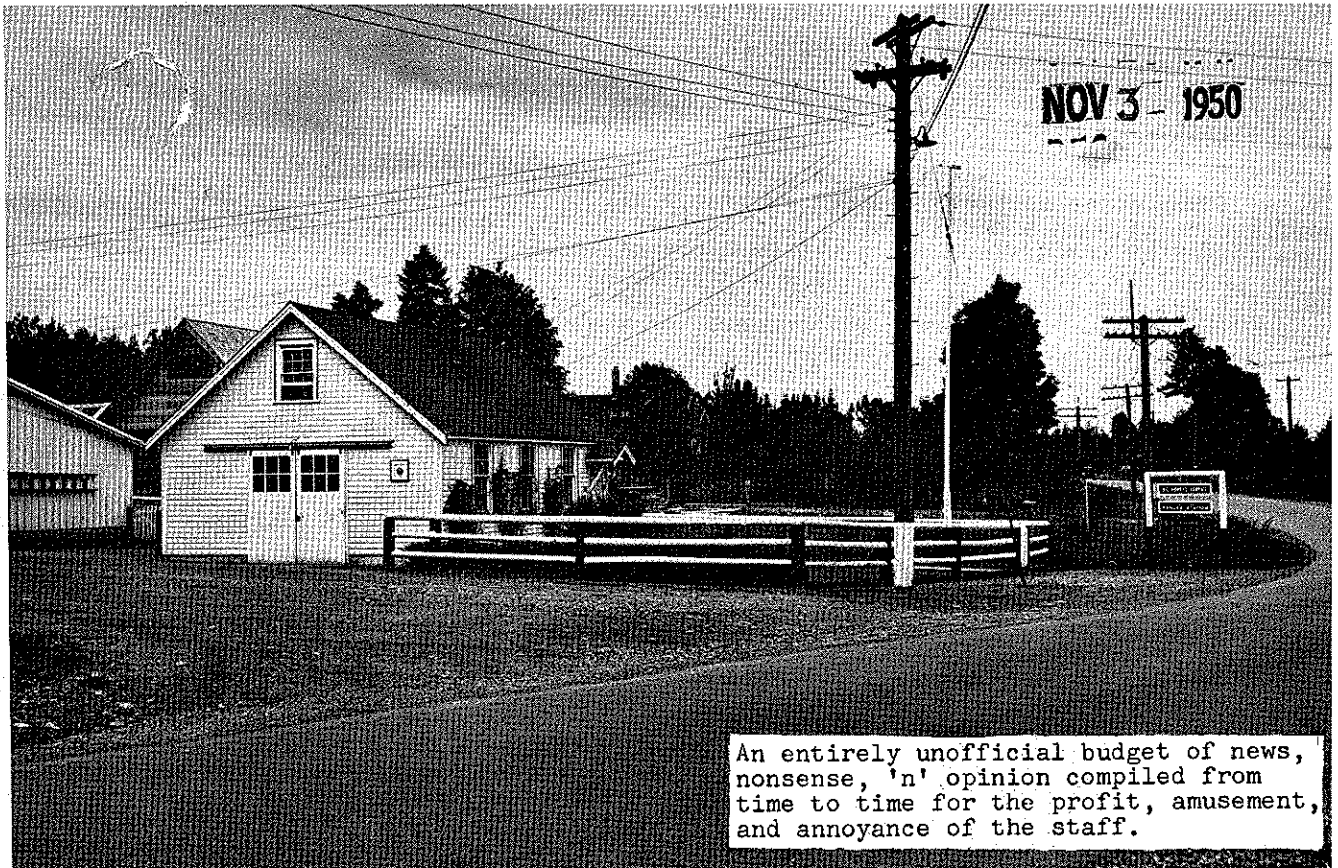


FOREST SERVICE NEWSLETTER



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HISTORY OF THE BEAUFORT SCALE

Ever since man first began to use water-borne craft for transportation, the force of the wind has been of great importance. Sailors learned to estimate wind-force and eventually evolved a scale which specified the force in descriptive terms such as "Calm", "Air", "Breeze", "Gale", "Storm", and "Hurricane". In addition, they qualified these terms by such adjectives as "Light", "Moderate", "Fresh", and "Strong".

At first these estimates were based upon the speed at which a ship might travel and the canvas she could carry safely under certain wind conditions and, with the advent of the steam-driven vessel, upon the effects of the wind on the ocean surface effects with which sailors were thoroughly familiar. Seamen knew, for instance, that the smallest ripples on the ocean surface responded to sudden changes in wind; that an apparent darkening of the waters indicated the travel of individual gusts.

With the gradual equipping of more and more of our lookouts with anemometers (wind-speed indicators) the words "Beaufort Wind Scale" have begun to take their place in the everyday working vocabulary of the lookoutmen and other field men in the Service. Without making any attempt to discuss the 12 wind-classes of the Beaufort Scale -- from "light air" and "light breeze" right up to "storm" and "hurricane" - it was felt that the story behind the Scale might be of interest to Newsletter readers.

In 1806, Admiral Sir Francis Beaufort, of the British Navy, devised a scale of wind force based on the effects of the wind upon the typical British man-of-war of his time. Perhaps he had noted that when a sailor described the wind as a light breeze, his "well-conditioned man-of-war, under all sail and clean full, would go in smooth water from 1 to 2 knots". In a similar manner, from his careful observations, he described the effects in the sailors' other terms of wind force upon his man-of-war.

Subsequent changes in the rig and tonnage of sail-driven vessels and the gradual replacement of sailing ships by steamships necessitated some readjustments of the original Beaufort scale.

Later, meteorology began to progress in the use of synoptic reports and, in 1874, the International Meteorological Committee adopted the then current version of the Beaufort scale for international use in the telegraphic transmission of weather data.

As originally drafted, the Beaufort scale made no reference to the actual speed of the wind. With the development of meteorology it became necessary to relate measured wind speeds to the Beaufort forces. It would have been simple to assign code numbers to an arbitrary scale, but winds reported from ships would continue, to a large extent, to be estimated, hence a correlative scale must be used. Even observers on land must from time to time make estimates of wind force. For these reasons, many determinations of the equivalents were attempted, but results varied widely.

Finally, independent determinations by the London Meteorological Office and by the Deutsche Seewarte were undertaken, under well-controlled conditions. Experienced seamen were stationed at exposed coastal or island stations where the sea was in full view. Here they made experimental estimates of the wind force. At the same time, winds were measured by an anemometer, and the measurements were correlated with the estimated wind force.

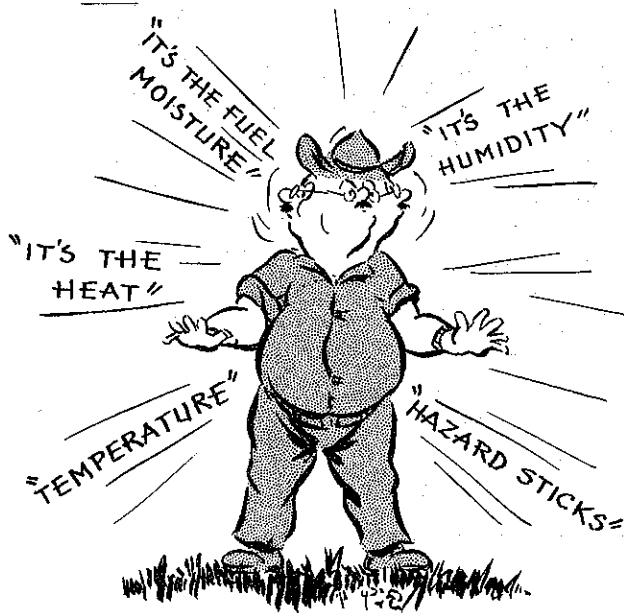
It was found that there was not a definite wind speed or even a decent interval of wind speeds for each Beaufort number. For instance, a wind estimated to be of force 7 by the British observer, would have a speed of 38 miles per hour as measured by

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History of the Beaufort Scale (Continued)

the anemometer at his station. But a 38 mile-per-hour wind at the German station might be estimated to be of force 9.

It was very improbable that two groups of experienced seamen, especially in view of the close contacts between seamen of all nationalities, would consistently show a difference of such a magnitude. Upon further study, it was found that the discrepancy was caused by the difference in the exposure of the instruments. The British exposures were unusually free of influencing topography, as typified by one at Scilly where the anemometer was set approximately 30 feet above the highest point of ground, itself 130 feet above sea level. The German anemometers, on the other hand, were mounted at comparatively low levels.



-- AND NOW, - A WIND SCALE!

agrees; and which prompts this article about a small group of Land Service employees, in what is called the General Administration Section, without whose whole-hearted co-operation and efforts the Forest Service would not function so smoothly as the "efficient machine" of which we are all proud.

The jobs they do are neither exciting nor glamorous but they are important, because without them the mail to and from the Districts could go astray; requisitions for every kind of supplies from paper napkins to parachutes could get lost in a welter of other work; and personnel matters concerning sick leave, holidays, and superannuation records of the permanent staff of the Service could get hopelessly confused.

Probably the most widely-known member of this Land Service Section -- insofar as the Forest Service field and district staffs are concerned -- is Sam Smith, Chief of the Department Property Room. Sam held a wide variety of positions with the old Department of Lands before "Forests" was incorporated in the name and before he replaced Bill Tait as Property Clerk when the latter moved to the Purchasing Commission in Vancouver in October, 1943. Born in Glasgow, Scotland, on November 7, 1907, he can be considered, however, a native of British Columbia for all practical purposes because by the time he was five years old he was living in Victoria. In the Spring of 1926 he joined the Water Rights Branch of the Department as a messenger and later in that year transferred to the Forest Branch in the same capacity. Within a year Sam had moved again -- this time to the Lands General Office as a Junior Clerk where he stayed until 1932 when he joined the General Administration Section of Lands. Eleven years later he was promoted to Property Clerk.

Sam has always been most active in athletic circles in Victoria and at present is serving as Secretary of the Victoria Committee of the B.C. Football Commission -- a central-control organization over all soccer activities in the city.

Sam Smith's experience in a variety of positions in different parts of the Department of Lands and Forests is of great benefit to him when handling the dozens of requisitions and enquiries each day for every type of equipment and material imaginable. The Property Room work is extremely complex and exacting in addition to being, as Sam says, "a general clearing house and collecting agency for everything other people don't know what to do with".

Another Lands man who does a yeoman job for the Forest Service is John A. Grant who heads the Lands and Forests filing mechanism. John is another who worked his way up to his present position from a messenger boy and, in so doing, collected a tremendous amount of information on just how the machinery of the Department functioned. John was born in Winnipeg, Manitoba, on July 24, 1906, and seventeen years later joined the Department of Public Works in Victoria. Later he transferred to the Forest Management office where he acted as messenger, thence going to Forest Accounts in the same capacity. By 1926 John was working as assistant to Alf Nunn in the bad (or good) old days of the Forest Development Projects. On October 1, 1929, he left F.D.P. behind to take a position in the Lands & Forests file room where he worked assisting Stan Hawkins until his enlistment in the Royal Canadian Ordinance Corps in July, 1942. John had been turned down for military service in 1940 but managed to enlist on the second attempt and remained in the army until July, 1944 when he returned to the Lands General Office. When Stan Hawkins moved to Lands General in March, 1950, John received his present appointment as head of the complex file room and vaults for the Department.

This led to the conclusion that the measured wind speed depended greatly upon the point of measurement, while the estimate of wind force did not depend upon the point of observation. Thus, the exposure of the anemometer had to be considered in converting wind speeds into Beaufort numbers.

Since it was believed that in general the influence of topography upon the anemometers of many stations in the United States, especially at coastal points, would approximate the conditions used in the British investigation, the British equivalents were adopted and are now in use by the United States Weather Bureau as the speeds corresponding to Beaufort forces shown on all surface weather charts and on the printed Daily Weather Map.

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WHERE CREDIT IS DUE

There is an old saying that one should "give credit where credit is due". An estimable idea with which the Newsletter firmly

Where Credit is Due (Continued)

On an average day, John and his five assistants handle some 500 incoming letters. In each case they must determine to which office or branch of the Lands, Water Rights, Surveys, or Forest Service the letters must go to receive the promptest attention. About 40 per cent of this mail is for the Forest Service. The vast, cavernous file-vaults, holding hundreds of thousands of files, some dating back to 1870, also come under John Grant's supervision.

Harold A. (Tommy) Tomalin, Recorder for the Department of Lands and Forests, is another of the team who carries out a very important function on behalf of the Forest Service. Tommy deals with all personnel questions related to holidays, absences, sick leave, superannuation, retirements, and promotions in connection with all permanent staff members of the Forest Service. The approval of all vouchers for the Department and the preparing and correlating of annual estimates also keeps him on the run.

Born in Bridlington, Yorkshire, on November 10, 1890, Harold Tomalin arrived in Canada early in 1911 and in British Columbia and the Water Rights Branch in 1912. He served Overseas from 1914 to 1919 with the Durham Light Infantry and the Royal Artillery and in 1920 returned to the Water Rights for three years before transferring to the Forest Branch. From 1928 to January 1930 he acted as Secretary to the Minister of Lands and was then appointed Recorder for the Department -- the position he has held ever since. Between October 1939 and January 1941 he again did a stint in the Army.

To these three "allied workers" -- Sam Smith, John Grant, and Harold Tomalin -- and their steadily-labouring staffs go the thanks of the Forest Service for jobs well done.



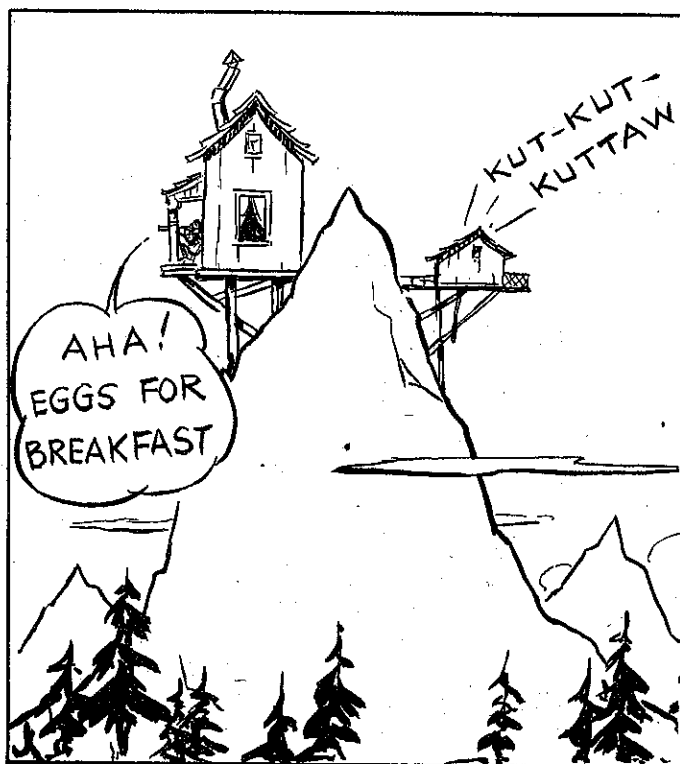
TOP LEFT... Sam Smith (seated) discusses requisition with Bob Young.
 TOP RIGHT... Ed McIntyre, 2 i/c Property Room receives "bundles for somebody" from assistant Lyle Russell.
 MIDDLE LEFT... John Grant (foreground) is backed up by two of his stalwarts - Don Higgs and Dennis Jenkinson.
 ABOVE... Three more File Room stalwarts - Brian Mullin, Bill Ross, and Bill Henderson.
 LEFT... Harold Tomalin and Margaret Sanderian-Allen pause for the Newsletter.

LECTURE TEAM TACKLE BIG PROGRAMME

A full-scale revival of what used to be a very effective educational function of the Service - the touring of public schools giving lectures and showing forestry films - is being undertaken again, starting this month. The way the new programme is shaping up, it is not only a revival of the stellar work done by Col. M.V. Allen, Hugh Weatherby, and others in the past but could almost be termed a super streamlined version of the original with expansion and embellishment.

The basic organization behind it all is the result of a combined operation on the part of our Public Relations Division and the B.C. Branch of the Canadian Forestry Association. In general terms, Vancouver Island and the Kamloops District will be the first areas to be covered by the new programme. The Island is being divided into a Northern and Southern section with the C.F.A. handling those Elementary, Junior High, and Superior Schools north of a line midway between Ladysmith and Nanaimo and the Forest Service handling the schools in the southern sector. The Service will also undertake the Kamloops District and, later, both organizations will tackle the Kootenays. Tentative plans have been discussed regarding the Fraser Valley and the northern areas of the Province but at the present time nothing definite has been decided upon.

The over-all plan of operation, type of lecture and films, and methods for sustaining interest in forestry in the schools are the results of joint decisions on the part of this Service and the C.F.A.



A monthly bulletin on general conservation subjects is in the preliminary stages of production. This will be sent to every Elementary, Junior High, and Superior School in the Province, regardless of whether it is covered by present tour or not. It is indicated that there will be some 850-950 such schools concerned.

Although it has been decided to restrict coverage to the schools only, in the early stages of what appears to be a 6-to-8 week tour, it is expected that later on it might be possible for the lecturers to give community and Service Club showings when requested.

In order to handle this considerable task, the Public Relations Division will expand its staff by the acquisition of two lecturers. One of the two lecturers for the Service is Ranger W.N. (Rusty) Campbell of the Fort George District who comes to P.R. & E. as a Technical Forest Assistant. Rusty, who is widely-known throughout the north country, completed a very worthwhile tour of a similar nature in the Prince Rupert and Fort George Districts during the winter and spring of 1949-50. (See August Newsletter for story).

The second lecturer and addition to P.R. & E. is Rex Mills who comes to us on a temporary basis from several years of doing similar work with the National Film Board and the Cancer Foundation. Rex started his stint on the southern part of Vancouver Island during October while Rusty has been going strong in Kamloops for a similar period. Each lecturer is being supplied with a projection unit and a wide selection of B.C.F.S. and C.F.A. publications for distribution to the teachers.

Gordon Philbrook, newly-appointed Chief Warden for the C.F.A. in British Columbia, will be that Association's member of the three-man team.

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"A. L. BRYANT" CRASH TRAGEDY

The heartfelt sympathy of all members of the Forest Service goes out to the families of F.A. Longstaff, W.M. Ingram, and A.P. Wrotnowski of the Vancouver District Office Scaling Staff, who lost their lives off Bowen Island in the recent collision between our launch the "A.L. Bryant", and the Union Steamship's "Lady Cynthia" on the evening of October 3, 1950.

Rescued from the icy water by members of the "Cynthia's" crew were Frank Paterson, seriously injured, and J.W. McDonald, H.L. Coles, and J.H. Kilby, all suffering from severe shock. Frank Paterson was rushed to a Vancouver Hospital by Water Taxi summoned by Captain W.L. Yates of the "Cynthia", while the other three survivors were treated for shock aboard the "Cynthia".

Official details of the accident are not yet available but according to press reports at time of writing, the accident took place about 5:30 in the evening while the "Lady Cynthia", 235 feet long and weighing 925 tons, was inbound for the Bowen Island summer resort. It was suggested by the Vancouver Weather Office that visibility may have been impaired by smoke from slash burning on Vancouver Island.

The records show that the "A.L. Bryant" has had a rather ill-fated history since she was purchased from Marine Transit Ltd. in 1929. On October 3, 1930 - exactly 20 years prior to the present fatal accident - the "Bryant" was rammed by West Vancouver Ferry "Sonrisa" as she backed from the dock. In June of this year she was rammed again,

"A.L. Bryant" Crash Tragedy (Continued)

this time by a tug in Center Bay, Gambier Island, and just last month, she had a brush with a small power boat in Fisherman's Cove. The "A.L. Bryant" had an overall length of 42 feet, a beam of 9 feet 6 inches and a gross tonnage of 16.55.

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MATCHED

On Saturday, October 7, 1950, J.M. (Mike) Finnis of the Research Section, Forest Economics, was married to Miss Margaret Joan Turner, at St. Mary's Church, Kerrisdale.

After a motor trip to California, Mr. & Mrs. Finnis will return to Victoria to make their home.

Our sincere wishes for good luck and good health to you both, Mike and Margaret.

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OUR MASTHEAD STORY

The Masthead on this issue pictures Ranger Stan Silke's trim-looking station at Courtenay, Vancouver Island. The simple, yet attractive fence and sign along with a nice green lawn and shrubs greatly enhances what otherwise could be quite drab. The building showing between the Ranger Station and garage is Reforestation's seed-extraction shed.

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TOMORROWS TIMBER

Ted Whiting of Reforestation looks over a part of the 1950 Douglas fir cone crop at the Courtenay cone-drying shed.

Although at time of writing, Reforestation was unable to advise your correspondent as to the total amount of seed collected this year, it is expected to be adequate to meet the requirements of the nurseries at Green Timbers, Duncan, and Campbell River.

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The Department recently received a letter addressed:

Mr. C.D. Orchard, Deputy Minister,
Dominion of Canada
Dept. of Reconstruction
Dept. of Lands and Forests
Victoria, B.C., Canada.

The envelope enclosed a travel bulletin entitled "Flight of Fancy".

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EDITORS MEET THE KRAZIEST KATZ!

The life of an editor - even of the Newsletter type - is no cinch. One is continually phoning people and pleading for "copy"; one tears ones hair; one gnashes ones dentures; one is continually and constantly in a state of extreme agitation.

With deadline time for this issue rushing towards us, we turned desperately to our regular contributors - Parks and Recreation. "Seymour Park there", we say sweetly enough. "Sorry, out of town". "Chester Lyons, then?" "Sorrerry - also away". "Well, who is there?!" we scream. "I am", is the answer.

Here, we turn on the charm, - the glamour - "Then, my little chicken - you can supply the Parks stuff for the Newsletter!"

As we hung up we felt sure we had noticed a "purr" on the line - and no wonder.



DEER MIZTER EDITER

bozz Oldhem gone to cadleberg Bay to build shack
house FOR MIZZUS and kids. SEA LYONZ SELLING books on STREET
CORNER - WONT HELP ON ACCOUNT HE NOW ~~BY~~ ^{HI} CLAYS OTTER.
MURKY TREW IN PARIS - WHAFFO WE ASK? ~~ME AACK~~ -
MACSMURCHY ~~STILL~~ STILL LOOKIN FOR LOST CLOCIC hup
Hisland (VANC). ZEE-MORE PARK, "CANNED SCOT,"
LOST IN BATTLE OF SALT SPRING ISLAND, (TWO BAD)
McGOON, him INJUNEER, NO CAN RITE. MONEY-MAN
CHARLTON get kilt in machine which ~~exhert~~ ^{BOOM} when ADD
UP NEXT YERES ~~ESTEWMENT~~ MONEY? ~~STUPOT~~ STEWART &
WAYDE WADE, DRAWMEN IS GUMPING OUT OF WINDER
WEN BOZZ ZAY PLANZ ALL HAYWIRE...

GRFICE GURLZ, HAG-NEZ, JERCE, JOIN 2 HAWDRY
ON STRIKE FROM WORK (FOR) MORE LONGER dayz, lezz
(More boyz)
MONEY A KRAZY WIMMIN!

^{DICKINSON}
HAIRY A NEW CLURK, give hisself rayze
to ⁴ESSTOR ~~FOURSTOR~~ - GONE ON TOOR.

MIKE ~~POWPE~~ ^{POWPE} ~~POPE~~ ^{POPE} ^{garden} ^{MAN}
WONT HELP-TOO

YORZ MOST
RIZPECTIVELY



JANITOR CAT (GRADE III)