PUBLIC HEALTH SURVEY
CITY OF BEAVERTON
STATE OF OREGON
MADE BY..... FRANK A. MINAS
JULY 1931
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DESCRIPTIVE DATA

Beaverton is situated nine miles west of Portland on the state highway and is very close to Hillsboro, the county seat of Washington County. It has grown rapidly in the past ten years having increased its population about 100% in this time. The town is laid out on practically level ground with a slight sloping to the north toward the site of the old Beaver Dam. Most of the land of the vicinity was at one time under water due to a large beaver dam. This dam was removed and the land allowed to drain.

The Southern Pacific R. R. has a branch road running out from Portland into the Tualatin Valley. Beaverton is surrounded with farms bearing a rich black soil. The town was incorporated in 1892 and the offices of mayor-four councilmen— and a treasurer recorder were provided for. Beaverton grew very slowly up until ten years ago but since that time it has progressed rather rapidly having jumped from a population of 600 to about 1100 in this period. Most of these people work in Portland and live in Beaverton. No industries are enjoyed by the community. About 5% of the population are well to do— 15% are indigent— 80% are wage earners. About 70% own their own homes. There are no active civic organizations and there are no health organizations. No license permits are issued by the town.
VITAL STATISTICS

Due to the size of Beaverton it was thought advisable to report the vital statistics for entire Wash County rather than for this particular community. The following figures were taken from the biennial reports of the State Board of Health. As the population of the County is considerably less than 100,000 the communicable disease morbidity rates are given on this basis rather than on the actual population. Infant mortality is on the basis of 1000 live births.

Special form blanks are furnished by the State Board of Health for notifiable diseases. The Dept. of health supplies blanks for births and deaths. Every cooperation is given the local health authorities so that accurate data may be compiled.

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<th>Year</th>
<th>1925</th>
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<th>1928</th>
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<td>Population</td>
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<td>Deaths</td>
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<td>815</td>
<td>905</td>
<td>967</td>
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<td>Infant Mortality</td>
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<td>16.6</td>
<td>17.0</td>
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<td>9.9</td>
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<td>302</td>
<td>81.5</td>
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<td>Tuberculosis</td>
<td>47.3</td>
<td>33.8</td>
<td>36.6</td>
<td>47.5</td>
<td>66.7</td>
<td>42.9</td>
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<td>all types</td>
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<td>Scarlet Fever</td>
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<td>163</td>
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<td>138.6</td>
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<td>Diphtheria</td>
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<td>Undulant Fever</td>
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<td></td>
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<tr>
<td>Syphilis</td>
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CONTROL OF WATER SUPPLY.

The Oregon Washington Water Service Co., with offices at Hillsboro, supply the water for this community. The water is taken from Sain Creek—collected—treated by chlorination and led by a main to the reservoir near Forest Grove. An eight inch main is used to convey the water from Hillsboro to Beaverton. This main is owned by Mr. Stipes of Stipes Garage. Two or three miles out of Beaverton is a tank which is used for pressure. The piping within the city limits is owned by the town. The local water office is at Stipes Garage. The water is sampled twice a week by the company. Examined for B. Coli and a total count made at its main office at Salem. The State Board of Health makes an analysis every three months. The supervision of the water supply is excellent in respect to disease control. There is only one criticism to make on the water supply and that is it is inadequate. In late summer the water pressure becomes very low and it is difficult to get water from the hydrants (i.e., according to the local physician). There are a few old wells, but at the present time none of them are being used.
ORGANIZATION OF HEALTH DEPT.

Up until this year the two physicians of the town acted in part time capacity as health officers. At the present time only one is carrying the duties of this office. He does not receive any compensation for this work. He usually acts only when called upon to do so. Occasionally visitations are made by the county physician and visiting nurse if necessity requires. This comprises the health organization of the community.

COMMUNICABLE DISEASES.

Beaverton has been very fortunate in not having had any serious epidemics in late years. The state board of health furnishes blanks to be filled out by the local physician for all communicable diseases. A weekly report of communicable diseases is made to the State Board of Health. The doctors are very careful as to these reports and pride themselves in their promptness to report. Owing to the fact Beaverton is only a short distance from Portland there are no hospitals or clinics available there. Adequate service and treatment with very little inconvenience is possible even though institutions are not located right in town. Quarantine is strictly adhered to and is as regulated by the State Board of Health in all cases. Careful attention is given to venereal cases. Advantage is taken in the use of the State Laboratory for verification and for the following of these cases. These cases are promptly reported.
WATER REPORT

Date: 6/12/38
Lab. No.: 42332
Date collected: 6/12/38
Date received: 6/12/38
City: Sain Creek-City - Treated - Water Co. Office
Source: Sain Creek-City - Treated - Water Co. Office

The bacteriological analysis shows the water to be in condition
A—Safe for drinking purposes.
B—Suspicious, probably contaminated. Another specimen should be sent.
C—Polluted and unsafe for drinking purposes.

REPORT TO BE SENT TO: Oregon Wash. Water S. Co.

P. D. STRICKER, M. D.
State Health Officer.

WILLIAM LEVIN, Dr. P. H.
Director of Laboratory.
Asst. Collaborating Epidemiologist, U. S. P. H. S.

WATER REPORT

Date: 8/28/38
Lab. No.: 43779
Date collected: 8/27/38
Date received: 8/28/38
City: Hillsboro
Source: Sain Creek - Treated - Water Co. Office

The bacteriological analysis shows the water to be in condition
A—Safe for drinking purposes.
B—Suspicious, probably contaminated. Another specimen should be sent.
C—Polluted and unsafe for drinking purposes.

REPORT TO BE SENT TO: Oregon Wash. Water S. Co.

P. D. STRICKER, M. D.
State Health Officer.

WILLIAM LEVIN, Dr. P. H.
Director of Laboratory.
Asst. Collaborating Epidemiologist, U. S. P. H. S.
CONTROL OF MILK SUPPLY

There are a few small dairies in the vicinity of Beaverton. Most of the town's supply is obtained from dairies located at Aloha. These dairies are quite modern in every respect and are regularly inspected by the state Dairy Inspector. They are kept very clean, even though many of them are not strictly modern as to type of buildings, etc. Considerable of the milk is pasteurized and their pasteurization is adequate. The barns are large, airy, clean and in good repair. The milk is distributed to the town's people, for the most part, through the local grocers. Most of the milk of the vicinity is marketed in Portland. The local dealers in milk have not as yet proved a problem for the health officer. Their sanitation is complete. No epidemics have ever been traced to either the milk or water supply. Only one or two cases of Diphtheria are known in the past several years, and they gave no concern nor could they be traced to the local milk supply. R
A REPRESENTATIVE DAIRY

The Guernsey Dairy supplies a good share of the milk and cream that is sold in Beaverton. This dairy is owned by Lon Kimmaman and is located one half mile south of Aloha. The farm consists of forty acres and he has thirty six cows which furnish him with his milk for market. During the past several years the dairy rating has never fallen below 95.0%. The milk that is furnished is raw and is not graded. The bacterial count has never exceeded 10,000 and many tests have shown the count to be as low as 1500. No epidemic has ever been traced to this supply.

The dairy herd is regularly inspected for Tuberculosis but has not as yet been inspected for B. Abortis. In the history of the place they have never had a positive reaction to T. B.. The handlers of the milk have never been submitted to routine health examination. All milk delivered comes from the dairy itself and not from indirect sources.

The barn is a wood structure—large—airy and clean—with a whitewashed interior. The floor is of wood and is tight. Each morning before milking the floor is bedded down. The stalls are thoroughly cleaned before noon each day. The dung is collected in troughs which are kept in a clean condition.

The cows are milked by machine. They possess a three pail Surge Milking Machine. This is sterilized thoroughly after each milking. They use a three man system in collecting the milk. One man washes the bags of the cows. A second man adjusts the milking machines and a third man strips the machine after the milking. The milk is collected in three pails and is then taken to the milk room which is a concrete house separate from the barn.
Here the milk is sent thru pipes which are water cooled. In this milk house the have an electric bottle washer—sterilizer and an electric separator. The bottles are washed and sterilized under steam pressure. The milk is bottled and immediately placed in an iced refrigerator. They do not have a pasteurization plant. The milk never stays at the dairy longer than ten hours before delivery. The sterilizer develops more than fifty pounds of steam pressure in a few minutes. After milking the milking apparatus is thoroughly sterilized and the rubber hoses are washed in chlorine water and scrubbed.

Skimmed milk is fed to the pigs. Sour cream is sent into Portland for market. No milk or cream is delivered in open vessels.

Dairy inspected Sept. 25, 1931

F. A. Minas.
SEWERAGE

Due to Beaverton being situated rather low in the Tualatin Valley drainage is very poor. There is no general sewerage system. The disposal of sewerage seems to be quite a problem to the community. Each individual household has a septic tank. These for the most part drain into open ditches along the streets. Some of these ditches remain open for a considerable distance and then drain into closed tile ditches. The odors are strong in the vicinity of these open ditches. The part of town south of the railroad tracks more or less drains into one large main tile. The north part of town has more individual systems. Eventually these all drain into Beaver Dam ditch which lies at a lower level north of town. The sewerage effluent from the septic tanks is in no way treated. Even with such seemable inadequate sewerage system they have never been able to definitely trace disease to this source. The main thing seems to be the disagreeable odors and the frequent blockage of the sewerage in the open ditches. A few outdoor toilets are still in use in the community. These have not created a problem.
GARBAGE - REFUSE - ASHES

THE TOWN has no regular routine as to collecting garbage, refuse, etc. Collections of this material is made only once a year. Considerable of the garbage of the business part proper is handled by an individual. His visitations are somewhat regular. In general, however, it is necessary for the individuals to care for their own refuse by burning, burying and dumping. The townspeople are handicapped in a way in handling their own refuse, as the town does not own an incinerator or does not have a regular dumping ground. Up until now dumping, garbage, etc., has not evidenced itself as a real problem, but promises to be in the near future unless this is more carefully regulated.

SANITARY NUISANCES

Running through the center of town is the highway, which is concrete asphalt. This is occasionally flushed by the town but by no means is this done often enough. The main streets looked quite dirty to the winter. Considerable dust was noticed in the air with passing cars. The side roads are for the most part gravel and dirt, which are occasionally treated with oil in the summer months. This summer nothing has been done to them. There are numerous vacant lots which are kept quite clean of refuse and weeds. As there are no industries in Beaverton the air is clear of soot and smoke. It is a quiet community. There are one or two private stables in town, but none that are
open to the public. There are lots of mosquitoes which are more or less of a nuisance to the community. Beaverton does not have to contend with industrial hygiene, because it is more of a residential and farming center.

HOUSING

The homes for the most part are small and comfortably built. Built adequately to cope with the summers and winters.

There are no tenement or apartment houses. There is one small hotel which is not of a modern type but is kept quite clean, is steam heated and is well ventilated. The business buildings are all small, being of the one and two story type.

SCHOOLS

The schools are modern in every respect. They are kept clean, good lighting and very good ventilation. Adequate playground space is provided, and is surfaced so as not to make dust a problem. Vaccination and Diphtheria Toxin-Antitoxin are made possible for the children once a year. Approximately thirty percent of the children accept this immunity each year. Close watch is kept over the children for communicable diseases. They are excluded from school when afflicted with any communicable disease.
MISCELLANEOUS

The inspection of food handlers is quite lax unless special attention is brought to some particular case. The health officer does not make regular inspection of the grocers, barber shops, restaurants, beauty shops, soda fountains, etc. This he leaves almost entirely up to state inspectors. These places are not even licensed by the town. There is no slaughter house or storage plants.

The local physicians make use of the diagnostic laboratories in Portland if occasion so demands.

There are no local health societies in the community, i.e. social service, red cross, clinics, or health centers. In this respect advantage is taken of the proximity to Portland. Frequent visitations are made by the visiting nurse, and an occasional visit by the county physician if necessity calls him.
GENERAL SUMMARY

In summary of this report on Beaverton, it might be said that it enjoys a population of about eleven hundred people. It is a residential and farming district, and is growing quite fast. The water supply is very good and it is adequately supervised at all times by both the owners and the State Board of Health. The health problems are handled by one part-time physician who works without salary. The milk supply is an excellent one and no disease has ever been traced to either the milk or water of the community. The sewerage, although it is not handled in the best way, has never given the town much concern, outside of disagreeable odors and occasional blocking of the ditches. Vital statistics are conscientiously by the local physicians and reportable diseases are likewise promptly reported. Garbage is inadequately cared for. No provision is made for dumping or burning of refuse.

Bad odors, mosquitoes and dust are the only nuisances that are outstanding. There are no industries, factories, apartments or large buildings. Advantage is taken of the clinics, welfare bureaus, hospitals, etc., in Portland, owing to its close proximity and consequently it is not necessary for them to maintain their own.

The schools are modern with adequate ventilation, lighting and etc., Vaccination and toxin-antitoxin is offered, of which thirty percent of the children accept each year. A careful check is made of communicable diseases, and such cases are excluded from school.
CRITICISMS OF SANITARY CONDITIONS OF BEAVERTON

A. Bad odors (developed from sewerage disposal)

B. No adequate way to handle garbage and refuse.

C. No central sewer system.

D. No treating of sewerage.

E. No adequate street cleaning.

F. No adequate inspection of food handlers, barber shops, fountains, restaurants, beauty shops, etc.
NECESSARY CHANGES WHICH SHOULD BE MADE

A. Treat effluent from Septic tanks.
B. Should construct a central sewerage system.
C. Employment of a garbage collector.
D. Construct an incinerator.
E. More adequate oiling of side roads.
F. More frequent flushing of main street.
G. More adequate water pressure.
H. Should have a space set aside for dumping.
I. Should have regular health inspection of stores, barber shops, restaurants, etc. At least twice a year. Also strict health exams for food handlers, not only when health officers attention is called to some particular case.
J. Health officers should be placed on a salary and their duties more definitely outlined.

Frank A. Mines