

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

WNS

May 25, 1956

Dr. Hollis M. Dole
Director
Department of Geology and
Mineral Industries
State of Oregon
1069 State Office Building
Portland 1, Oregon

My dear Dr. Dole:

I am writing this note to say that the Pleurotomaria specimen which was the subject of a recent letter by me to you was received in my absence. I am writing to assure you it is safe and that we appreciate very much having it here.

Yours sincerely,



G. Arthur Cooper, Curator
Division of Invertebrate
Paleontology and Paleobotany

RECEIVED
MAY 29 1956

STATE DEPT. OF GEOLOGY
& MINERAL INDS.

May 21, 1956

Dr. Hubert G. Schenck
585 Washington Avenue
Palo Alto, California

Dear Dr. Schenck:

Thank you for sending the letter from the United States National Museum. To date we have heard nothing from them.

Your cooperation in keeping us informed is greatly appreciated.

Sincerely yours,

Hollis M. Dole
Director

HMD: jr
Encl.

COPY
UNITED STATES
DEPARTMENT OF THE INTERIOR
Geological Survey
Washington 25, D.C.

Room 338
U.S. National Museum

May 14, 1956

Dr. Hubert G. Schenck
585 Washington Avenue
Palo Alto, California

Dear Dr. Schenck:

The specimens of Pleurotomaria have been received. At your request I have assigned U.S.N.M. catalogue number 562079 to the small specimen from U.S.G.S. locality 15605 and U.S.N.M. catalogue number 562078 to the elegant large specimen from Stanford Univ. locality 3221, donated by Mr. Dole.

To complete the catalogue entries in our catalogue book I need to ask you for some additional information. Are either or both of these specimens to be holotypes or are they to be figured specimens or what will be their type status, if any? Has a species name been assigned to them? Could you tell me by whom and when (year) the specimen from Stanford locality 3221 was collected?

Please extend our thanks to the proper people for the donation of the large Pleurotomaria, and our thanks to you for your part in the transaction. It is certainly a splendid addition to our collections, and we are very pleased to have it.

Copies of this letter have been sent to Dr. Cox and Dr. Keen.

Sincerely,

/s/ Ellen J. Trumbull

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.



May 17, 1956

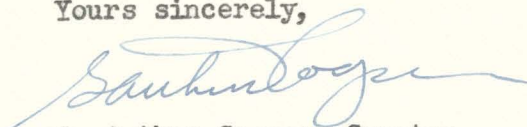
Dr. Hollis M. Dole
Director
Department of Geology and
Mineral Industries
State of Oregon
1069 State Office Building
Portland 1, Oregon

My dear Dr. Dole:

When I returned from a short trip in the field, I found your letter of April 25, addressed to Dr. Kellogg, awaiting me. I am very pleased that you have presented the interesting Pleurotomarid gastropod to the National Museum. I have not yet received the specimen but, assuming that Dr. Schenck has it, I have written him for it.

Please be assured that I appreciate your thoughtfulness in turning over an important type to the Museum. I assure you further that this specimen will be available for examination by students.

Yours sincerely,



G. Arthur Cooper, Curator
Division of Invertebrate
Paleontology and Paleobotany

RECEIVED
MAY 22 1956

STATE DEPT. OF GEOLOGY
& MINERAL INDS.

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

MAY 28 1956

Dr. Hollis M. Dole, Director
Department of Geology and
Mineral Industries
State of Oregon
1069 State Office Building
Portland 1, Oregon

My dear Dr. Dole:

Referring to your letter of April 25, 1956, I am pleased to acknowledge the receipt of the unusual type specimen of the genus Pleurotomaria from Western Oregon. You may be sure that it will be available for loan to your organization and to other qualified students.

We are very glad to receive this addition to the national collections. The specimen has been entered on the records of the U. S. National Museum as a gift in your name, for which please accept my thanks.

Very truly yours,

Remington Kellogg

Remington Kellogg
Director

RECEIVED
MAY 31 1956
STATE DEPT. OF GEOLOGY
& MINERAL INDS.

April 25, 1956

Mr. Remington Kellogg, Director
United States National Museum
Washington 25, D.C.

Dear Mr. Kellogg:

Professor Hubert G. Schenck of Stanford University has sent to this office your letter relative to the Eocene Pleurotomarid gastropod from western Oregon.

You state in your letter that specimens will be available for loan to donors. Therefore as Director of this Department I hereby give to the United States National Museum the Eocene Pleurotomarid gastropod from western Oregon received by the Museum from Dr. Hubert G. Schenck, with the understanding that this specimen will be available for loan to this Department.

I certainly understand your position and can readily see why the Museum is anxious to have all "strings" taken from their specimens. It is difficult also for departments such as ours to donate rare and unusual specimens found in the State to organizations outside of the State. Nevertheless in the interest of science I believe my action is justified.

Sincerely yours,

Hollis M. Dole
Director

HMD:jr
cc Hubert G. Schenck

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON 25, D. C.

APR 17 1956

Mr. Hubert G. Schenck
585 Washington Avenue
Palo Alto, California

Dear Mr. Schenck:

Thank you for your letter of March 24 relative to your wish to have the type of a new species of Eocene pleurotomarid gastropod from western Oregon placed in the National Museum. I note that it is Mr. Dole's desire to deposit the specimen as a "permanent loan."

While I realize that a "permanent" loan does not actually exist but implies that the lender will never recall the item, there is always an element of doubt and the ownership is not complete. At the present time we are endeavoring to clear our records of past loans and at the same time to decline the acceptance of materials on the indefinite loan basis. It is our policy not to accept specimens that are offered with specified limitations as to recording, display, methods of care, etc., in order to avoid future complications in proof of ownership or legal heirs to estates. Therefore, we shall be pleased to accept the type pleurotomarid gastropod as a gift to the national collections with the assurance that it will be well cared for and will be available for loan to the donor and other qualified students.

I hope you will understand our position in this matter and I assure you we are particularly desirous of building up the type collections in the Museum where they may be available to the increasing numbers of research workers and students from all countries who visit us annually. We appreciate Mr. Dole's thoughtfulness in thinking of the national collection as a depository for his specimen.

I am very pleased to learn that you are able to undertake your work again even though on a limited schedule, and I hope you will continue to improve in health.

Sincerely yours,



Remington Kellogg
Director

HUBERT G. SCHENCK
585 WASHINGTON AVENUE
PALO ALTO, CALIFORNIA

RECEIVED
APR 24 1956

April 21, 1956

STATE DEPT. OF GEOLOGY
& MINERAL IND.

Mr. Hollis M. Dole, Director,
Department of Geology and Mineral Industries,
1069 State Office Building,
Portland 1,
Oregon

Dear Mr. Dole:

Enclosed is a letter from Dr. Remington Kellogg
about the Pleurotomaria from Oregon. Perhaps you would
like to reply to it, with a carbon copy to me.

Personally, I believe that the National Museum
policy is sound. I can see the difficulties which might
result from the complications mentioned by Dr. Kellogg.
Perhaps there is no law which you have to follow in this
regard and you could make an outright donation to the
Museum.

Sincerely yours,

Hubert G. Schenck

Fossil

March 21, 1956

Prof. Hubert G. Schenck
Department of Geology
Stanford University
Stanford, California

Dear Professor Schenck:

I must apologize for not informing you earlier that the cast of the Pleurotomaria was satisfactory. Thank you for your conscientious inquiry of March 19.

My understanding now is that you will take the matter up with the proper authorities of the United States National Museum to have the fossil placed in that institution.

I am happy to hear that the Pleurotomaria was of interest to you and Dr. Cox and its disposition has met with your approval.

Sincerely yours,

Hollis M. Dole
Director

HMD: jr

HUBERT G. SCHENCK
585 WASHINGTON AVENUE
PALO ALTO, CALIFORNIA

March 24, 1956

Dr. Remington Kellogg,
Director,
U. S. National Museum,
Washington 25, D. C.

Dear Remington:

Dr. L. R. Cox (British Museum) and I plan to describe a new species of Eocene pleurotomarid gastropod from western Oregon. A type specimen was kindly placed at our disposal by Mr. Hollis M. Dole, Director of the Oregon Department of Geology and Mineral Industries.

It seems to us that this specimen should be deposited in the U. S. National Museum, where it will be taken care of properly and will be available to students of the mollusks. Mr. Dole is willing to deposit the specimen with you on a "permanent loan" basis, if you would be willing to accept it. Please let me know what to do, and if it is not too much trouble, kindly send a carbon copy of your letter to Mr. Dole, 1069 State Office Building, Portland 1, Oregon.

The doctor lets me work only about three hours a day so I have to find many short-cuts. I have long been meaning to write to you about the Whaling Convention, but that will have to wait.

Sincerely,

HUBERT G. SCHENCK

c/o Mr. Dole ✓
Dr. Cox

RECEIVED
MAR 27 1956

STATE DEPT. OF GEOLOGY

BOX 1528
STANFORD, CALIFORNIA

HUBERT G. SCHENCK
585 WASHINGTON AVE.
PALO ALTO, CALIF.

MAR 19 1956

Dear Mr. Dale:

~~THANK YOU FOR~~

Was the cast of the
Pleurotomaria satisfactory?

Sincerely,

Hubert G. Schenck
HUBERT G. SCHENCK

HUBERT G. SCHENCK
585 WASHINGTON AVENUE
PALO ALTO, CALIFORNIA

VR

January 30, 1956

Mr. Hollis M. Dole,
Director,
Department of Geology and
Mineral Industries
1069 State Office Building
Portland 1, Oregon

Dear Mr. Dole:

I was delighted to hear that you would consider favorably placing the specimen of Pleurotomaria in the United States National Museum. You have interpreted my letter correctly.

As soon as Professor Keen receives the fossil and makes the cast we can take up the matter of the next steps to be taken. I am sure that the decision to handle the specimen in this way is wise.

I hope that sometime when you come down to this part of the country, you will give me the pleasure of meeting you.

Sincerely yours,

Hubert G. Schenck

Hubert G. Schenck

HGS/pw

RECEIVED
FEB 8 1955
STATE DEPT. OF GEOLOGY
& MINERAL INDS.

Pleurotomaria specimen in musuem case was mailed to Prof. Myra Keen at Stanford Univ. Feb. 3, 1956. This specimen has no accession number. Molds and pieces of other specimens (probably from same locality) are in fossil drawer no. 5 of Dept. museum.

Attached label was in case with specimen.

M.L. Steere

PLEUROTOMARIA

A middle Eocene gastropod from the Ellendale quarry about 3 miles west of Dallas, Oregon.

Donated by: Mr. L. Lambert, operator of the quarry

January 24, 1956

Prof. Hubert G. Schenck
Department of Geology
Stanford University
Stanford, California

Dear Professor Schenck:

Under separate cover I am sending Professor Myra Keen, School of Mineral Sciences, Stanford, California, the new species of Pleurotomaria from the Ellendale rock quarry that is at this office.

From your letter I understand that Professor Keen will prepare a cast of the fossil and forward it to us and if the cast meets with our approval you will take up the matter of placing the Pleurotomaria in the U.S. National Museum in Washington, D.C.

I hope that I have interpreted your letter correctly and that this matter is taken care of to everyone's satisfaction.

Sincerely yours,

Hollis M. Dole
Director

HMD:jr
cc Prof. Myra Keen
bc Ewart Baldwin

Ewart - The deed is did. Any comments?

HUBERT G. SCHENCK
585 WASHINGTON AVENUE
PALO ALTO, CALIFORNIA

January 23, 1956

Mr. Hollis M. Dole, Director,
Department of Geology and Mineral Industries,
1069 State Office Building,
Portland 1,
Oregon.

Dear Mr. Dole:

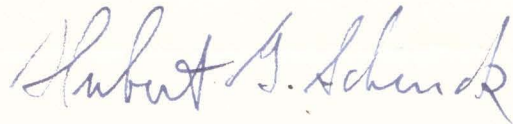
Thank you very much for your letter of January 18th,
in reply to my query about the new species of Pleurotomaria
from the Ellendale rock quarry, Polk County.

It is good news that you might consider favorably the
proposal to send the specimen to the U. S. National Museum
on an indefinite loan basis.

If you would be kind enough to send the fossil to
Professor Myra Keen, School of Mineral Sciences, Stanford,
California, she will see that a satisfactory cast is made
for you. If this, in turn, meets your approval when you
have the cast in hand, I can then get in touch with Dr.
Charles Merriam, Geological Survey, Menlo Park, who will
take up with the authorities in Washington the matter of
an indefinite loan.

Dr. Cox and I are grateful to you for your permission
to borrow the Pleurotomaria and for your helpful cooperation.

Sincerely yours,



Hubert G. Schenck

c/c Dr. Merriam
Dr. Keen
Dr. Cox

RECEIVED
JAN 24 1956
STATE DEPT. OF GEOLOGY
& MINERAL INDS.

January 18, 1956

Prof. Hubert G. Schenck
Department of Geology
Stanford University
Stanford, California

Dear Professor Schenck:

This is in reply to your letter of January 9 concerned with the new species of Pleurotomaria on display in our museum.

This fossil was found by Mr. Leon Lambert, 270 S. 14th Street, Salem, Oregon, at the time he was the operator of the Ellendale rock quarry located just west of Dallas. It was in this quarry that Mr. Lambert found the Pleurotomaria. Mr. Lambert turned the fossil over to Prof. Ewart M. Baldwin of the University of Oregon who at that time was on our staff. I have written to Prof. Baldwin and he informs me the fossil was found "near the central part of the south edge of sec. 25, T. 7 S., R. 6 W., Polk County".

The Pleurotomaria is kept in the museum of the State of Oregon Department of Geology and Mineral Industries in Portland, Oregon. It has no acquisition number. I would not be adverse to placing it with the U.S. National Museum in Washington, D.C. on an indefinite loan basis. However it would have to be loaned with the understanding that the loan could be terminated at any time by this Department. Also we would like to receive a plaster cast of the Pleurotomaria to replace the original. It would be desirable if the cast would be colored. In the meantime if you would wish to borrow the specimen, we would be happy to send it to you.

Sincerely yours,

Hollis M. Dole
Director

HMD:jr
cc Ewart M. Baldwin

STANFORD UNIVERSITY
STANFORD, CALIFORNIA

SCHOOL OF MINERAL SCIENCES

January 9, 1956

Mr. Hollis M. Dole, Director,
State Department of Geology and
Mineral Industries,
1069 State Office Building,
Portland, Oregon.

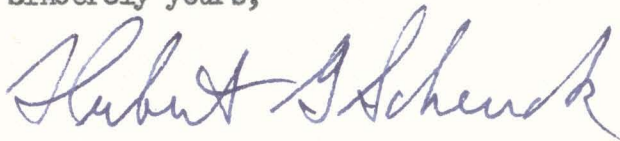
Dear Mr. Dole:

A number of years ago I reported on an Eocene gastropod from Oregon (Geological Society of America Proceedings for 1934, p. 387), but only now are the new species of Pleurotomaria being described for publication. This is possible because of the collaboration with Dr. L. R. Cox, British Museum (Natural History), London.

I have been told that you have a specimen collected by a Mr. Lambert some time ago. I am not sure of the details because I have been on duty overseas for about ten years. Dr. Cox and I would like to refer to this specimen, with the full name of the collector, and other information (township, range, section, etc), and its repository and acquisition number.

Owing to its value to science, you might like to consider the possibility of placing it on indefinite loan to the United States National Museum in Washington, D. C. I believe that our Curator here has a cast of the specimen, but I have not yet had a chance to check up on all pertinent details.

Sincerely yours,



Hubert G. Schenck
Professor of Geology

c/c Dr. L. R. Cox

*sent copy to
Frank Baldwin
1-11-56*

RECEIVED
JAN 11 1956

STATE DEPT. OF GEOLOGY
& MINERAL INDS.

October 12, 1964

Mr. John A. Kraus
2002 California Street
Eureka, California

Dear Mr. Kraus:

Your letter of September 9 to the State Highway Department concerning a find of fossil wood in southwestern Oregon has just reached my office.

Public Law 87-713 states that the collection of petrified materials is to be controlled by Federal law. As I understand it, the Bureau of Land Management has established regulations in regard to collection of this type of material and is restricting collections to 10 pounds per person. Consequently I feel that your concern as to removal of this material from Federal property has been adequately taken care of. If, however, the material is on private land, then it is up to the landholder to decide how this material must be disposed of.

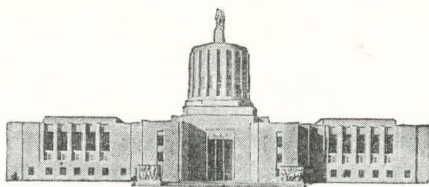
It was very kind of you to write and call this to our attention.

Sincerely yours,

Hollis M. Dole
State Geologist

IND:jr
bc Len Ramp

COMMISSIONERS
GLENN L. JACKSON, CHAIRMAN
MEDFORD
KENNETH N. FRIDLEY, MEMBER
WASCO
DAVID B. SIMPSON, MEMBER
PORTLAND



STATE OF OREGON
STATE HIGHWAY DEPARTMENT
SALEM 97310

September 16, 1964

Mr. John A. Krause
2002 California Street
Eureka, California

Dear Mr. Krause:

Your letter of September 9 has been referred to this office for attention.

First of all, may I say thank you very much, Mr. Krause, for a fine demonstration of a public spirited attitude of conservation. We have no idea in this office where this particular spot you are speaking of is located, but I feel most certain that the State Parks Division of the Oregon State Highway Department and the Department of Geology and Mineral Industries will be interested in corresponding with you. I am, therefore, sending copies of your letter to these agencies with the thought that they may wish to correspond with you.

Very truly yours,

Don E. Seeley, Coordinator
Intra-State Travel
Travel Information Division

DES:jw

cc-State Parks Division
Dept. of Geology and Mineral Industries ✓

RECEIVED
OCT 7 1964

STATE DEPT. OF GEOLOGY
& MINERAL INDS.

*Hi Len!
How about this?
LJ*

Oregon State Highway Dept.
101 State Highway Bldg.
Salem 10, Oregon

John A. Krause
2002-California St.
Eureka, Calif.
Sept. 9 - 1964

Gentlemen:

I was recently walking the mountains in the vicinity of Port Orford, Oregon. I had been searching for the famous lost Port Orford meteorite, when I came upon a mountain the upper third is strewn with pieces of petrified wood. I did not make a close examination but I noticed some pieces 2 ft. long or longer. The place is very brushy but no doubt there is much of it there.

The main point of my writing this letter is that up until now this mountain was not accessible but now it has been made so by a logging road and 'rock hounds' are going to soon know about it and will take this petrified wood away. In fact I have shown a local 'rock-hound' a sample and described it and he wanted to know where it was and how to get there. I did not tell him.

I suggest that this matter be called to the attention of the proper State officials and see if they might be interested in either salvaging or preserving this natural treasure for the benefit of the general public. If they will contact me I can furnish a sample of this petrified wood and also guide them to it.

Sincerely John A. Krause

September 30, 1963

Mr. Leon Fredrich
1727 S.W. Cable
Portland, Oregon

Dear Mr. Fredrich:

A year or so ago you brought in a box of excellent fossils for our museum collection. These fossils have been stored in a box until last week when I finally found some time to work on them. On unwrapping them I noticed that each specimen was neatly numbered, apparently according to some system of cataloging which you used for maintaining a record of them. I am wondering if you still have this information and could let us see it. What we are particularly interested in knowing is the location from which the fossils came. You have indicated the source of some of them on slips of paper, but others are not located. It would be much appreciated if you would let us use any records that you have on this very fine collection of fossils.

Sincerely yours,

Margaret L. Steere
Geologist

MLS:lk

Isabel

May 7, 1962

AIRMAIL

Mr. John G. Koch
Department of Geology
University of Wisconsin
Madison, Wisconsin

Dear Mr. Koch:

This is to acknowledge receipt of your letter of May 4 in which you note that the fossil teeth found at the time you conducted us through your area turned out to be those of an ichthyosaur.

The person who found them was Mr. Norman V. Peterson, district geologist with the State of Oregon Department of Geology and Mineral Industries with offices at Grants Pass.

Would you think it possible or desirable to print a resume or abstract of your paper in THE ORE.-BIN? Frankly I would very much like to see this done but, of course, that is between you and Dr. Camp. I am certainly glad to see that you are going to write this up for a national publication and that you will send us a copy when it has been published.

This is the first time to my knowledge that ichthyosaur remains have been found in western Oregon and to the best of my knowledge it is the first sign of marine reptiles ever to be found in the Portlandian rocks. Frankly I am very excited and pleased by this discovery.

Best regards.

Sincerely yours,

Hollis M. Dole
Director

HMD:jr

Department of Geology
University of Wisconsin
Madison, Wisconsin

May 4, 1962

Mr. Hollis M. Dole
Director
State of Oregon
Department of Geology and Mineral Resources
1069 State Office Building
Portland 1, Oregon

Dear Mr. Dole:

During a conducted field trip through my area, between Gold Beach and Port Orford, you and part of your staff had the opportunity to become more familiar with some of the coastal geology.

An interesting stop was that at Sisters Rocks. Here, one of your group found vertebrate teeth and bones in the Portlandian sediments.

I have mailed these to Dr. Charles Camp of the University of California, Berkeley. They have been identified by him as representing part of a marine reptile, an ichthyosaur. Dr. Camp expressed interest in reporting this occurrence and describing the fossil fragments in a national publication. It will be a co-authored paper; the occurrence, discovery, and stratigraphy to be described by myself.

To give credit where credit is due I would like to cite the name of the finder, a member of your staff. However, embarrassingly for me, I have forgotten his name. But I do know that he is tall and slender, that he has done a great deal of work on Tertiary volcanics in Lakeview County, and that he was stationed at Grants Pass. I hope that you can supply me with the name of this individual, the finder of these vertebrate fossil remains at Sisters Rocks.

Thank you.

Yours truly,

John G. Koch

John G. Koch

RECEIVED
MAY 7 1962
STATE DEPT. OF GEOLOGY
& MINERAL IND.

Fossils

September 25, 1961

Mr. Charles Roy
935 W. Marion
Elkhart, Indiana

Dear Mr. Roy:

The attached list of vertebrate and plant localities in the John Day formation of eastern Oregon is probably the extent of the known outcrops where such fossils have been found; although, of course, there may be others that have not been reported. Some of the locations for the vertebrates may seem rather generalized, but this is because the John Day bones are pretty well scattered through the buff and green beds of that formation. The red beds at the base of the John Day formation are almost void of vertebrates (except no. 3 on list), but do contain fossil plants.

Sincerely yours,

Margaret L. Steere
Geologist

MLS:lk
Encl.

FOSSIL LOCALITIES IN JOHN DAY FORMATION

Wheeler, Grant, and Crook Counties, Oregon

FOSSIL VERTEBRATES

1. Brothers quadrangle

Hill south side of Bear Creek

Sec. 7, T. 19 S., R. 18 E.
Crook County

2. Monument quadrangle

Exact location not given

Secs. 7 and 9, T. 9 S., R. 27 E.
Grant County

3. Picture Gorge quadrangle

South bank of Deer Gulch east
side of John Day River, in
base of formation.

SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 30, T. 11 S.,
R. 26 E. Grant County

4. Kimberley and Picture Gorge
quadrangles

In numerous cliffs and gulches
along John Day River between
Picture Gorge and Kimberley
(Original collecting area)

Ts. 11 and 12 S., R. 26 E.
Grant County

5. Richmond quadrangle

Near top of formation

NE $\frac{1}{4}$ sec. 25, T. 11 S., R. 23 E.
Wheeler County

6. Mitchell quadrangle

In "The Cove" and "downstream
from Clarno"

T. 7 S., Rs. 19 and 20 E.
Wheeler County

FOSSIL PLANTS

1. Monument quadrangle

Along Deer Creek road

Approximately center sec. 32,
T. 8 S., R. 28 E.
Grant County

2. Picture Gorge quadrangle

South bank Deer Gulch near
vertebrate locality

SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 30, T. 11 S.,
R. 26 E. Grant County

3. Mitchell quadrangle

a. Knox Ranch

SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 20, T. 7 S., R. 20 E.

b. Pentecost Ranch

NW $\frac{1}{4}$ sec. 19, T. 7 S., R. 20 E.

c. Dugout Gulch

SE $\frac{1}{4}$ sec. 22, T. 7 S., R. 19 E.

These localities contain
fossil fish:

e. Painted Hills State Park,
Bridge Creek flora

Approximately on line between
secs. 1 and 2, T. 11 S., R. 20 E.
Wheeler County

Elkhart, Indiana
September 16, 1961

State Department of Geology
1069 State Office Building
Portland, Oregon

Re: Margaret Steere

Thank you very much for your help. If it is possible, I would like more localities in the John Day formation. They do not necessarily have to be on the main roads. I would appreciate it if they were located by the township-range method, if this is possible.

Thank you.

Yours truly,

Charles Roy

Charles Roy
935 W. Marion
Elkhart, Indiana

MM/CR

Frank

August 10, 1961

Miss Gloria Van Tassel
Route 1, Box 361
St. Helens, Oregon

Dear Gloria:

Your fossil is a very nice shark tooth. The tooth enamel is what makes it look shiny and also helps to preserve the tooth as a fossil.

Sincerely yours,

Margaret L. Steere
Geologist

MLS:lk

Fossils

March 1, 1961

Mrs. Fred Van Tossel
Route 1, Box 361
St. Helens, Oregon

Dear Mrs. Van Tossel:

Your fossil arrived and I can see why you were so puzzled about it. I am not absolutely sure what it is myself, but I believe it is probably a piece of the shell (carapace) of a fossil crab. Some of the material might be parts of the claws also. The cullular structure is characteristic of crab shells.

Fossil crabs are fairly common in the Oligocene marine beds of northwestern Oregon, especially inside those hard round concretions that are so difficult to break open. Most of the crabs are small - generally not over $2\frac{1}{2}$ inches long.

Perhaps when you and your family get out to do some more collecting again, you will find some of these crabs and will be able to compare them to the specimen you sent to me. In any event, I certainly wish you the best of luck in your fossil hunting, and I will be glad to try to identify any specimens that you need help with. I am returning the crab (?) under separate cover.

Sincerely yours,

Margaret L. Steere
Geologist

MLS:lk

Tossel

February 16, 1961

Mrs. Fred Van Tossel
Route 1, Box 361
St. Helens, Oregon

Dear Mrs. Van Tossel:

Thank you for writing to us about your fossil collection. We do take an interest in fossils and have a fairly large collection here in this office. We would be happy to show it to you if you are ever in this vicinity and wish to stop by.

Regarding your fossil that you are puzzled about, it is very possible that this is a member of the starfish family and might be a section of a crinoid stem, but I would have to see it in order to be sure. I am enclosing an article on fossils of the Sunset Highway area that contains some illustrations of crinoids and perhaps would be of help.

If you would like to either bring your fossil to this office or mail it, I would be very glad to try to identify it.

Sincerely yours,

Margaret L. Steere
Geologist

MLS:lk
Encl.

Finds Fossil

119



R. T. Mooers, Lakeview, hold a fossil which he found recently near Warner Valley. Examination at the University of Oregon disclosed the specimen was the leg bone of either a camel or horse. An assay of the deposit material in which the fossil was found, showed it to be carbonaceous sediment (bone coal). The fossil was in an opalized condition.

assistant. All you need is mass of bulging muscles.

Fossilized Clams Found 100 Feet Beneath Dunes

NORTH BEND (Special) — What do you know about phylum molluska of the class Pelecypoda?

You won't learn much from phylum, or any other member of the same class either.

Phylum molluska isn't communicative, except in some way with its own kith and kin. And anyone who can read this story isn't kith or kin to phylum molluska of the class of Pelecypoda.

Folks who read up on things scientific will recognize the topic of interest is a clam.

But the specific clam is one believed to have lived several thousand years ago along the southwest Oregon coast. His

fossilized shell has been buried 100 feet beneath the dunes north of Coos Bay for an unknown period of geological time.

The specimen, about as large in circumference as a baseball, came up from the depths during the drilling of new wells that Pacific Power & Light Company installed to supply water to the Menasha pulp and paper mill under construction on the dunes.

T. C. Davenport, field engineer for the PP&L project, reported the largest shell was brought up from 100 feet, and a number of smaller specimens came from the 70-foot level.

Frederick

January 14, 1960

To: Eleanor Gordon
Wallace Eubanks

From: H. G. Schlicker

I copied the map from Smith's thesis and sent that along with the abstract which was mailed yesterday. I would like the map back sometime. Probably you would like to photograph it for your presentation. I think a map would certainly help to show that the upper Thomas Creek locality is lower Miocene and definitely part of the Mehama formation.

There is some question in our minds as to exactly what is called the lower Thomas Creek locality. I have marked on the map a leaf locality just below the dam at Jordan which has been called the lower Thomas Creek locality by Jack Wolfe and Roland Brown. Hergert agrees with you as to the lower Thomas Creek locality. This shouldn't be too confusing, however, since you give the location in your abstract.

You may want to rewrite some of it, and I believe you should make a few additions or corrections. Regarding additions to your abstract, I have suggested to Wally by phone that some explanation should be made as to why the flora listed conclusively dates the rocks lower Miocene. Probably just a statement or two in the abstract is all that is necessary; however, at the presentation you should probably have a slide indicating the ranges for each of these plants. I also note in the abstract that I have used "leaves" and it may be that you want to change this to "wood" if that is what you used to identify them. You also may want to mention Roland Brown somewhere with reference to the age of these leaves. I wasn't quite sure where to refer to him.

You will note that I have omitted several items you had in your abstract. I don't believe it is necessary to mention your two trips to the locality with Brown. After copying the map and marking on the

Cassile

December 21, 1959

Mr. Weldon Draper
1661 E. Loma Alta Drive
Altadena, California

Dear Mr. Draper:

The active beach along the coast of Oregon has been declared a public highway and is administered by the State Highway Commission, State Highway Building, Salem, Oregon. It is extremely unlikely that you will be able to obtain a lease to actively mine the beach lying between the low and high tide lines, and even if this were possible, I am afraid that you would find that the vagaries of wind and wave would pose very difficult problems.

In recent years almost all of the interest in the black sands of the southwestern Oregon coast has been centered on the so-called "back beaches", which lie at some distance from the active beach. Ownership of the lands varies from place to place, but much of it can be leased. Due to the location of the back beaches they are protected from the work of the waves. I believe that when you have examined Bulletin 945-E, the location of these areas will be perfectly clear.

Sincerely yours,

Ralph S. Mason
Mining Engineer

RSM:lk

DEC 11-1959
1661 E. LOMA ALTA DR
ALTADENA CALIF.

DEAR MR. MASON:

MANY THANKS FOR your PROMPT REPLY CONCERNING
my inquiry on THE BLACK SANDS.

One Question WHICH I MISSED in THE PREVIOUS letter
WAS -- SINCE THE CONVENIENT AND MOST ACCESSIBLE
SAND LIES BETWEEN HIGH AND LOW TIDES, AM I NOT
CORRECT in ASSUMING THAT THESE SANDS ARE UNDER
THE CONTROL OF THE STATE AND NOT THE FEDERAL
GOVT.. IF SO, WHO WOULD I CONTACT REGARDING RIGHTS
TO WORK THESE STATE BEACHES? SOMETHING FAIRLY
POSITIVE AS TO LEASE, LENGTH OF LEASE AND ROYALTIES

CERTAINLY APPRECIATE THE BULLETIN 945-E ALTHO
UP TO THIS DATE IT HAS NOT ARRIVED.

Sincerely -

WELDON DRAPER -

P.S.

WOULD APPRECIATE A RETURN ANSWER AS I MAY TAKE
A RUN UP TO REVIEW THE SITUATION BETWEEN XMAS &
NEW YEARS -

Steere

December 28, 1959

Dr. Wilbert R. Danner
Department of Geology
University of British Columbia
Vancouver 8, British Columbia
Canada

Dear Dr. Danner:

Enclosed is a copy of a letter from Dr. Bostwick of Oregon State College with his diagnosis on the Volsella. It would seem that nothing comparable occurs in the Oregon State College Eocene faunas, although other Pacific Coast Tertiary collections might cast a new light on the subject. If you would like to have me send the material on to the University of Oregon, Stanford, or University of California at Berkeley, I would be glad to do so, but I imagine you will prefer to handle it yourself.

I told Dr. Bostwick that I would ask you to advise him on what to do with the specimens. If you don't want them returned I'm sure the college would like to add them to their collections.

I shall be much interested to hear about the results of your work on the Bear River deposit.

Sincerely yours,

Margaret L. Steere
Geologist

MLS:lk
Encl.

October 28, 1959

Dr. Wilbert R. Danner, Assistant Professor of Geology
Department of Geology
University of British Columbia
Vancouver 8, British Columbia
Canada

Dear Dr. Danner:

Of course I remember you! You trapped animals on the Conference field trip, as did most of the rest of us. Chief difference was that you knew what you were catching.

On returning from my vacation a few days ago, I found your letter and the fossils, but I'm afraid I'm not enough of a paleontologist to identify them. The two pelecypods are no doubt VolSELLa, but that's about as far as I can go. They certainly aren't cowlitzensis or kelsoensis, which are the two species reported from Eocene formations in northwestern Oregon. They look more like Oligocene species figured in Weaver. There is nothing comparable in our meager collections here in Portland.

Ewart Baldwin describes algal limestone from the Dallas and Buell quarries in his bulletin on the "Geology of the Dallas and Valsetz quadrangles" (our Bulletin 35), and calls it upper Eocene Tyee equivalent. It rests unconformably on middle Eocene submarine volcanics that form the core of the northern Coast Range. Unfortunately, although other megafossils are reported from this limestone, no VolSELLa are mentioned.

If you would like, I will send your specimens to Dr. David Bostwick at Oregon State College or to Dr. Myra Keen at Stanford. I'm sure either one would be very glad to identify them. Perhaps you would rather send them to the University of Washington. In any event, I shall hold on to them till I hear from you further.

Thank you very much for the two reprints of your very interesting and well written fossil articles. I am delighted to have them.

Sincerely yours,

Margaret L. Steere
Geologist

MLS:lk

Wills

September 28, 1959

Miss E. E. Bell
28 Broadway
Seaside, Oregon

Dear Miss Bell:

This is in regard to your request for someone qualified to identify woods in thin section.

Mr. Wallace Eubanks, 1615 Norway Street, Salem, Oregon, is the person you want. Mr. Eubanks presented a paper on identification of fossil woods in thin section at a meeting of the Oregon Academy of Science several years ago and has since continued his research along those lines. I believe if you will write Mr. Eubanks, some satisfactory arrangement can be made.

Sincerely yours,

H. G. Schlicker
Geologist

HGS:lk
cc Wallace Eubanks

Fossils

October 27, 1959

Mrs. Henry Holt
Oakridge
Oregon

Dear Mrs. Holt:

Your question about marine shells high in the Cascades was referred to us by the State Library.

We have never heard of marine shells in that region and wonder if you could write to us and give us more definite information about their location and what they look like.

In the Coast Range there are extensive areas underlain by marine sediments which in places contain shells. But in the Cascade Range all of the rocks are the result of volcanic eruptions and no marine beds are associated with them.

Sorry not to be able to answer your question without more information. Perhaps you could send us some of the shells for identification.

Sincerely yours,

Margaret L. Steere
Geologist

MLS:lk

Fossils

September 15, 1959

Mr. C. B. Abrams
Route 1, Box 79
Hermiston, Oregon

Dear Mr. Abrams:

I regret very much the delay in answering your letter which arrived here nearly a month ago. It somehow got buried under other material that accumulated during the vacation and field trip season.

You asked about the development of the hills south of Hermiston and about the fossil bones you found there. The hills and valleys are erosional features formed by streams and glacial flood waters. The topography is developed on Pliocene to Pleistocene sedimentary rocks overlying a thick series of Miocene lava flows (Columbia River basalt). Agatized wood has been found in sedimentary lenses between the Miocene lava flows, but I haven't heard of any discoveries of bones in this formation.

A large and varied fauna was discovered in excavations at the McKay Reservoir a few years ago. It included tigers, beavers, horses, elephants, camels, turtles, ducks, and many other animals. Dr. J. Arnold Shotwell of the Museum of Natural History at the University of Oregon, published an article on this discovery in the June 1956 issue of the Bulletin of the Geological Society of America. He dated the fossils as middle Pliocene. The McKay Reservoir fossils occur in tuffaceous sandstone and conglomerate which rest on Columbia River basalt. Since these sedimentary rocks are widespread in the Columbia plateau region it is likely that they crop out in the hills you mention. The fossils could range in age from late Miocene to Pleistocene.

If you find diagnostic material such as fossil jaw bones and teeth, you could contact Dr. Shotwell. I believe he would be glad to identify the animals and would probably be able to determine their age.

I hope this information will be helpful and that its delay hasn't inconvenienced you too much.

Sincerely yours,

Margaret L. Steere
Geologist

MLS:lk

C.B. Abrams

Rte. 1 Box 79 Hermiston, Oregon

Oregon State Dept of Geology + Mineral Industries
1069 State Office Bldg.,
Portland, Ore.

Dear Sir

Can you give me information as to the age and development of the hills South West of the town of Hermiston.

I have found agatize bones on these hills, which I think are from the Miocene Period. Do you have information as to the animal life that lived in this part of Oregon in the Miocene Period?

Thank You
C.B. Abrams

RECEIVED
AUG 18 1959

STATE DEPT. OF GEOLOGY
& MINERAL IND.

Fossils

September 4, 1959

Dr. Huntington Williams
Commissioner of Health
Baltimore City Health Department
P.O. Box 1877
Baltimore 3, Maryland

Dear Dr. Williams:

I am glad to hear that the fossils reached you safely and that you are pleased with them. You are quite right about their being Miocene in age. To be technical about it, they are from the John Day formation of late Oligocene to early Miocene age.

Unfortunately we haven't published anything on *Metasequoia*; however, there are two excellent booklets on the subject that I would like to recommend. Both are by the noted paleobotanist Dr. Ralph W. Chaney, University of California.

1. Chaney, R. W., "Ancient forests of Oregon," Condon Lecture Series, 1948. It may be purchased from the University of Oregon Press, Eugene, Oregon. Price is \$1.00.
2. Chaney, R. W., "A revision of fossil *Sequoia* and *Taxodium* in western North America based on the recent discovery of *Metasequoia*": Am. Philos. Soc. Trans., vol. 40, part 3, 1950. It may be purchased from American Philosophical Society, Independence Square, Philadelphia 6, Pennsylvania. Price is \$1.50.

Considering your keen interest in *Metasequoia* and its fossil forms, I believe you would enjoy having both of these publications.

Your friend Dr. Adolph Weinzirl is well known in Portland. For a number of years he and Mrs. Weinzirl were members of the Geological Society of the Oregon Country.

Sincerely yours,

Margaret L. Steere
Geologist

MLS:lk

August 25, 1959

Dr. Huntington Williams
Commissioner of Health
Baltimore City Health Department
P.O. Box 1877
Baltimore 3, Maryland

Dear Dr. Williams:

Your letter regarding the Metasequoia has reached us and we want to let you know that we are very pleased to send you several fossil specimens. They will be mailed to you under separate cover. Apparently Metasequoia was one of the commonest trees in western North America 30 to 40 million years ago, as fossils are found so frequently in rocks of that age. Metasequoia differs from Sequoia (Redwood) primarily in having needles that are opposite in position on the stem and in being deciduous.

The specimens we are sending you came from the John Day formation near Clarno in Wheeler County in central Oregon. They have been sprayed with plastic Krylon to bring out the detail of the leaf imprints and help preserve them.

Sincerely yours,

Margaret L. Steere
Geologist

MLS:lk

HUNTINGTON WILLIAMS, M.D., Dr. P.H.
COMMISSIONER

ROSS DAVIES, M.D., M.P.H.
CHIEF ASSISTANT COMMISSIONER



BALTIMORE CITY HEALTH DEPARTMENT

Baltimore 3, Maryland

August 17, 1959

PO Box 1877

State Geologist
State Capitol
Salem, Oregon

Dear Sir:

It is my understanding that somewhere in Oregon your geologists have come upon a very special fossil formation from the ancient metasequoia trees showing the pine-like needles.

I saw a specimen of this in the hands of an expert who had worked on the matter with the Harvard Botany Department this summer while in Albany County, New York, where the rocks are very full of usual Devonian seashells. My friend also had a modern metasequoia that had been brought from China where it has recently been found still extant.

Arnold Arboretum

tree, grown from seeds

This letter is to write and ask if you could assist me in securing a small specimen of this metasequoia foliage fossil from Oregon. I do not know who else to write and so I write to you because of a life-long interest I have in these matters.

With sincere thanks,

Very truly yours,

Huntington Williams, M.D.

R

Commissioner of Health

RECEIVED
AUG 24 1959
STATE DEPT. OF GEOLOGY
& MINERAL IND.

Trails

June 19, 1959

Mr. Mike Lee
1335 S.E. Lane
Roseburg, Oregon

Dear Mr. Lee:

Thank you for your letter of June 15.

Regarding the fossil bone (there was only one bone), we have had it on display here in the office and also showed it to a group at the Geological Society. The consensus seems to be that it is part of the fossilized tusk of a late Ice-Age elephant and that Indians may have unearthed it and used it for a tool. The filling was apparently silicified long before the Indians found it, as the silica is ground down along with the ivory of the tusk. It is also possible that the fossil is water-worn and was deposited in the bed of the stream when it was flowing at a higher elevation.

Thank you for the loan of this interesting fossil. Would you like to have us send it back?

In a separate envelope I am sending you an issue of The Ore.-Bin containing some information on Oregon meteorites. None are specifically from the areas you mentioned but perhaps you will be interested in reading the article.

Sincerely yours,

Margaret L. Steere
Geologist

MLS:lk

1335 S. E. Lane
Roseburg, Oregon
6/15/59

Dept. of Geology & Mineral
State Office Bldg.
Portland, Oregon

Dear Sir:

Do you have any pamphlets
or printed matter on Meteors.
Especially those around Coos
Bay and Roseburg.

Did Margaret Steere ever
decide what those fossils
Jones were that I gave her
last January? The one's east
of Myrtle Creek, Douglas
County. I'd like to know what
they turned out to be. Thanks.

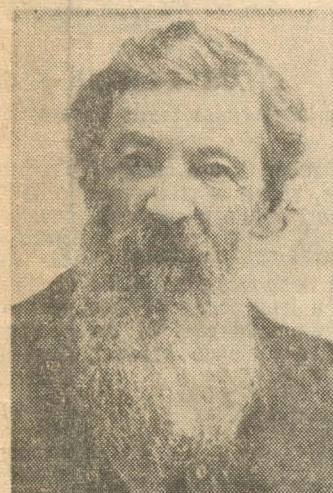
Sincerely yours,
Mike Lee

The Preacher's Three-Toed Horses

Ancestral form of saber tooth tiger once roamed Eastern Oregon. Unearthed bones indicate rhinos, three-toed horses and giant pigs also inhabited Oregon country.



Leonard Kopcinski, World War II marine sergeant, sits with rockhound's hammer and hairy mammoth tusk he discovered near Madras. The tusk is at least 25,000 years old.



REV. THOMAS CONDON
Father of Oregon geology

Rev. Thomas Condon, First State Geologist in the 1870s, Followed Trails From Seashore to Highlands in His Search for Fossils

By PHIL BROGAN
Oregon Geological Writer

ON A JULY day in 1865, supply wagons serving a company of cavalry in the isolated Central Oregon Indian country slowly made their way toward The Dalles on the Columbia, over dusty, rugged roads. Days before, the wagons had headed out of Camp Watson, in the northern fringe of Ochoco timber not far west of the John Day River.

Aboard one of the wagons was a strange cargo—the bones of creatures, such as rhinos, three-toed horses and giant pigs, that had lived in the Oregon Country millions of years ago. The arrival of the cavalry wagons at Ft. Dalles might be considered the beginning of the science of geology, the study of the earth, in the new state of Oregon.

Cavalrymen on the trail of renegade Indians had found the fossils in the remote range country near the head of

Crooked River. They carefully excavated the bones from hard, colored clays, capped in places by tilted rimrock lavas. Knowing of the interest of a missionary pastor in The Dalles in rocks and fossils, the soldiers through their leader, Capt. John M. Drake, sent the stony relics by the wagon train to the frontier fort that overlooked the mid-Columbia valley and the Washington hills to the north.

The pastor with a deep interest in the story of the earth and its ancient creatures and plants was the Rev. Thomas Condon. He was to play a major role in the geologic exploration of Oregon, part of which had been casually scouted as early as 1855 by John Strong Newberry of the Pacific Railroad Surveys.

Thomas Condon, with Bible and pick, followed trails that reached from the Newport beaches on the Oregon coast to the rugged highlands of the

interior country, where he found beds of primordial seas folded into mountains.

It was said of Thomas Condon, who spent 10 years in The Dalles, then moved to Forest Grove to teach and in 1872 to accept the newly created position of state geologist at a salary of \$2,000 a year, that he "caught the first glimpse of Oregon's lands as they rose from the ocean bed." Those emergent lands were the cornerstones of Oregon, shores of which were washed by the waves of warm seas.

After his interest in the interior Oregon wilderness of 1865 was aroused by the fossils sent to The Dalles from Camp Watson, Thomas Condon made many trips into the Indian country, where the renegade Piutes blazed their trails with the blood of miners, ranchers and soldiers.

There, in the Ochoco highlands and the John Day fossil country, Condon "saw the sea

shells upon Oregon's old beaches, watched the development of grand forests, viewed Oregon's first animals feeding on old lake shores and listened, in imagination, to the cannonading of old volcanoes."

It was in 1876 that Prof. Condon was called to Eugene, to occupy the new chair of natural sciences of the state university and earn the title of father and founder of Oregon geology. His fame spread across the continent, and his brilliant discoveries in the Oregon field brought earth scientists here from eastern centers of learning and from Europe.

In the 19th century epoch of discovery in the Oregon Country, the name of Dr. Condon stands almost alone. His geologic writings date from 1869 to 1906. His publications were few, his letters were many.

It was Dr. Condon, an amateur geologist, who discovered most of the salient features of

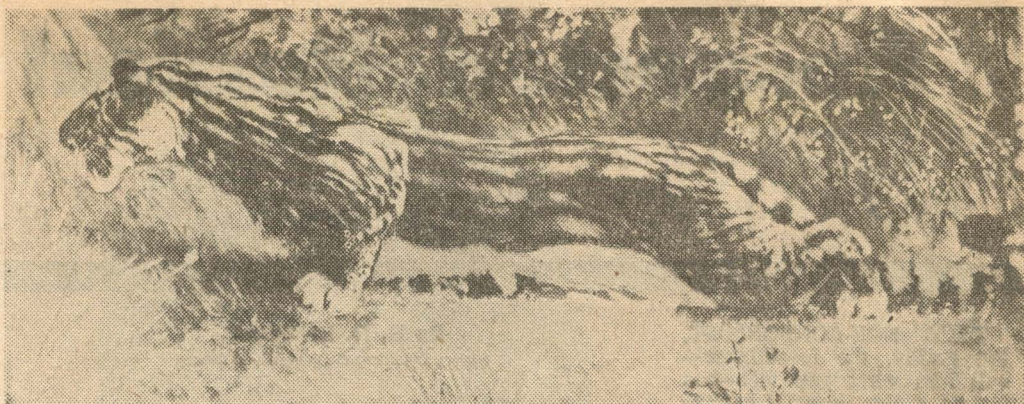
Oregon geology. For almost half a century Dr. Condon, paleontologist-pastor of The Dalles, traced and recorded almost single-handed, the complicated geology of a wide area of Eastern Oregon, from the shoreward sweep of the last oceans of Cretaceous times to the present.

Geologists say that the work of the pioneer geologist was remarkable in its extent and integrity. After the passing of nearly a century, the findings of Oregon's pastor of the rock still remain basic truths.

There has been a rapidly growing interest in Oregon geology in recent years, the result of studies by highly trained men, each specializing in his own particular field.

As a result of those studies details of the picture of Oregon geology so boldly traced by Dr. Condon long ago have taken clear shape.

In Oregon centennial year 1959, the over-all picture of



gon geology and its allied sciences, especially paleontology, is one of the grandest in the entire Union. It is a moving picture of two islands emerging from a warm primordial ocean, a great barrier of volcanoes in thundering eruption off the ancient Oregon coast and the birth of the original Cascades, which slumped into the earth under their own weight.

This broadened picture of Oregon is one portraying a huge mass of lava spilling over the northwest, the warping and folding of the interior country, the erosion and disappearance of mountain ranges, the coming of Oregon's long winter in the ice age and the formation of huge lakes in the shadow of tilted ranges.

This picture also shows some creatures Dr. Condon never dreamed of—titanotheres and their kin unearthed from the newly discovered Clarno mammal beds.

A hundred years from now, the picture of Oregon geology will hold new and startling features, imposed on the background spectacularly traced by Dr. Thomas Condon, past geologist of pioneer days.

Oregon Geological Highlights

WHAT WERE the 10 most important geological events in the history of Oregon? Geologists differ in their opinions. But to the layman, Oregon's 10 big geologic stories of the ages in their order of occurrence might be listed as follows:

1. Emergence of the two islands, postulated by Dr. Thomas Condon, from an ancient ocean to form the cornerstones of Oregon.

2. Recession of last of series of Cretaceous seas from interior Oregon and Oligocene seas from western Oregon, roughly to form Oregon of present.

3. Spread of semitropical forests and plants over most of early Tertiary Oregon, and growth of great forests of redwoods, allied species in Eastern Oregon.

4. Coming of the first mammals, apparently in Clarno times, and expansion of faunae in John Day epoch.

5. Early volcanic action that built up the ancestral Cascades, just west of Cascades of the present,

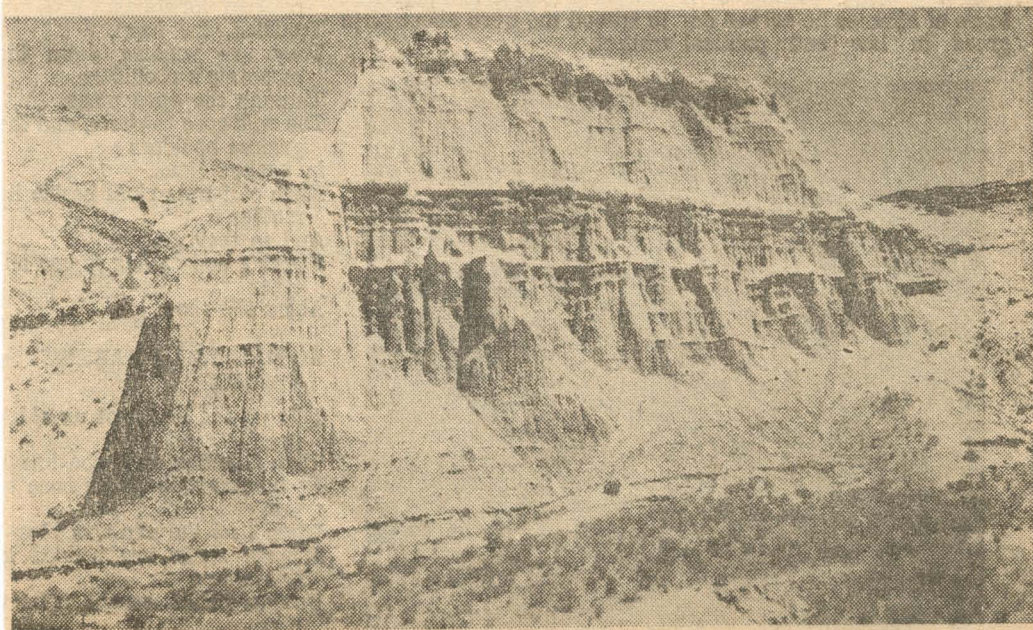
6. Earth warping and folding that resulted in the creation of various mountain ranges, in different epochs.

7. Spread of Columbia lavas over some 200,000 square miles of Northwest, including much of Oregon.

8. Growth of north-south line of volcanoes that created high Cascades of present, damming of ancestral Columbia by Hood eruptions and creation of Lake Condon in the Dalles area.

9. Coming of Ice Age, glaciation of Pliocene volcanoes and creation of series of lakes in Eastern Oregon.

10. Mt. Mazama explosion and engulfment and formation of Crater Lake.



Geologists are able to trace history back through millions of years in "pipe organ" formations such as this one located near Mitchell, west of John Day. The fossil beds in this area are popular with vacationers, photographers and geologists.

Fossils

March 24, 1959

Dr. Myra Keen
School of Mineral Sciences
Stanford University
Stanford, California

Dear Dr. Keen:

Thank you ever so much for identifying the fossil that had us so puzzled. Your letter and the specimens arrived last Friday, and your speedy reply is much appreciated. I am sure the people who loaned their specimens will be as pleased as we are to know the fossil has finally been identified. We certainly were surprised to learn that it is a coral and are glad to know about Durham's paper describing it.

This particular locality at Mist has yielded an unusually interesting fauna and I hope someone will eventually make it a project to study.

Thank you for your kindness.

Sincerely yours,

Margaret L. Steere
Geologist

MLS:lk

Frank

March 13, 1959

Dr. Myra Keen
Department of Geology
Stanford University
Stanford, California

Dear Dr. Keen:

Dr. Walter Youngquist of the geology department at the University of Oregon has suggested that I send a certain fossil to you for identification. It appears to him to be a mollusk or possibly a brachiopod. It was found at the crinoid locality of Moore and Vokes (U. S. Geol. Survey Prof. Paper 233-E) in the west bank of the Nehalem River near Mist, Columbia County, Oregon in association with a variety of echinoderms and mollusks.

I am taking the liberty of sending the fossil to you in the hopes that you will be willing to tell us what it is. In the package there will be two pieces of rock containing specimens of what appear to be the same thing. These were collected from the Mist locality and brought into our office for identification. Since nothing like it has been seen around here before, we are curious to know what it is and shall be very grateful for your opinion. We promised the collectors that their specimens would be returned.

Sincerely yours,

Margaret L. Steere
Geologist

MLS:lk

Fossil

February 26, 1959

Mrs. William LeVeque
Curtis Junior High School
8901 West 40th Street
Tacoma 66, Washington

Dear Mrs. LeVeque:

We are happy to learn that you are planning a tour through the John Day Country the last week of March.

In another envelope we are sending you some trip syllabi which may help you in planning your tour. There would be no objection to having these duplicated for the group if you so desired. We are also including ten copies of our Ore.-Bin which contain an article on the John Day fossil area. Additional copies are available from this Department at a cost of five cents each. Two books you may wish to obtain are Ancient Volcanoes of Oregon, by Howel Williams, and Ancient Forests of Oregon, by Ralph Chaney. These are available from the State System of Higher Education, Eugene, Oregon, for \$1.25 and \$1.00, respectively.

We would like to suggest stopping at the fossil leaf beds directly behind the Fossil High School, and the leaf locality in the Painted Hills State Park might also be visited provided the weather is good. The volcanic ash in which most of fossils have been preserved turns into a sticky clay when wet. Turtle Cove has not been very productive in recent years but if the weather is good it might pay to spend a little time looking around there for bones.

We note that you plan to be in Portland on the 25th and if you have not already done so you might very profitably plan on visiting the Oregon Museum of Science and Industry, which is located about half way up Canyon Road 5 minutes from downtown Portland. Since the Museum is normally open only in the afternoons you might wish to write to Mr. Douglas Huegli, Director, 4015 S.W. Canyon Road, who, I am sure, would arrange to accommodate your group.

There are no restrictions on digging for fossil material at any of the points mentioned above provided the landscape is not defaced unnecessarily. Although it would be preferable to have a guide who is familiar with the country, we do not feel this is absolutely necessary, and if you have any further questions after examining the material we have sent you please do not hesitate to call on us or the Museum.

Sincerely yours,

Ralph S. Mason
Mining Engineer

RSM:lk

Curtis Junior High School
8901 West 40th Street
Tacoma 66, Washington
February 23, 1959

Oregon State Department, Geology and Mineral Industries
1069 State Office Building
Portland, Oregon

Gentlemen:

Can you please help us with information about study of the John Day Valley fossil beds?

A large group of faculty, parents, and students of Curtis Junior High School are planning an educational field trip through Oregon, the last week of March. We need to know sources of information about the fossil areas for advance study courses, necessary permits for studying the beds, the advisability of expert supervision and instruction while we are there, etc.

We shall deeply appreciate any suggestions and assistance you can give us. Our itinerary includes a visit to the Maryhill Museum late in the morning of March 22 and a day in Portland on the 25th. The interim we should like to spend in North central Oregon, if possible.

Thank you.

Yours very truly,

Dorothy LeVeque
Dorothy LeVeque (Mrs. William)
Curtis Junior High School
8901 West 40th Street
Tacoma 66, Washington

MUSEUM

RECEIVED
FEB 25 1959

STATE DEPT. OF GEOLOGY
& MINERAL INDS.

Fossils

March 24, 1959

Mrs. Barry Jamieson
2548 S.E. 174th Avenue
Portland, Oregon

Dear Mrs. Jamieson:

Your fossil has been officially identified by Dr. Myra Keen at Stanford University as being a coral: Flabellum hertleini Durham.

She informs us that this fossil was originally discovered in a similar geologic formation in Washington and was named and described by Dr. J. W. Durham, University of California. Illustrations and descriptions of this and other corals are contained in Durham's paper, "Eocene and Oligocene coral faunas of Washington," Journal of Paleontology, January 1942. We have this publication and you are welcome to see it any time you wish. Apparently there are a number of kinds of corals to be found in the marine formations of southwest Washington and northwest Oregon.

If you would like to loan this fossil to us for a while, we would be happy to put it on display, with your name on it, along with some other fossils from the Mist locality. If you don't want to leave it with us any longer, that is perfectly O.K. We appreciate your loaning it to us this long. By the way, I still have your other fossils here in safe keeping.

Sincerely yours,

Margaret L. Steere
Geologist

MLS:lk

Foran

February 24, 1959

Mrs. Barry L. Jamieson
2548 S.E. 174th Avenue
Portland, Oregon

Dear Mrs. Jamieson:

Your fossils from the Mist locality were sent to Dr. Ewart Baldwin at the University of Oregon who turned them over to Dr. Walter Youngquist, paleontologist. A copy of Dr. Youngquist's reply is enclosed. So you see, your fossil stumps the experts. I would like to hold on to the larger specimen for a while, if you don't mind, but if you want to pick up the others - the echinoid plates, etc., you may have them any time.

I would like to see if anyone else has found specimens of that white radiating pelecypod (or brachiopod) with a better-preserved hinge area. Some of Dr. Allen's students have collected from the Mist locality and might possibly have some of this material.

In any event, I would like to send your specimen to Dr. Myra Keen at Stanford, if it's O.K. with you. I believe that eventually someone will study this fauna in detail, and when that is accomplished a lot of mysteries will be solved - maybe.

Sincerely yours,

Margaret L. Steere

MLS:lk
Encl.

Fossils

February 10, 1959

Mr. Douglas Emlong
Box 113
Gleneden Beach, Oregon

Dear Mr. Emlong:

It sounds as though you are working up a very fine collection of fossils. When it comes to identifying them, we believe (as do most persons in the scientific field) that a person who collects specimens derives much greater satisfaction from his work if he identifies the specimens himself. Moreover, his collection has far greater value if he does this.

There are many books containing pictures and illustrations of Oregon fossils, and I believe you could borrow quite a few of them from the State Library in Salem. I am enclosing a list of suggested references. If you can determine the genus name (or even just the family name) of the fossils, that should be quite sufficient. These are Latin names.

Other information that is equally important and should accompany each fossil includes: location, a description of the rock formation, the age of the fossil, and date collected. Also, for your display you might describe or illustrate the environment in which the animal lived and include a map of Oregon showing distribution of the fossils.

I would like very much to come and look at your fossils some time, but could not arrange to do so for several months. I must inform you, however, that neither I nor any of the other geologists in this office are trained paleontologists. Consequently we probably could not identify all of your specimens. It might be that you could do as well, if not better, yourself with the right books.

Enclosed with the reference list are a few reprints of articles published in the Ore.-Bin that may be helpful in providing the age of fossils and type of rock formation. I hope you have real success with your display and will let us know how you progress with it.

Sincerely yours,

Margaret L. Steere
Geologist

MLS:lk
Encl.

LIST OF BOOKS ABOUT FOSSILS

Merriam, John C.

Published papers and addresses: Carnegie Institution of Washington, Pub. 500, vols. 1, 2, and 3, 1938. (Describes and illustrates John Day vertebrates)

Weaver, Charles E.

Paleontology of the marine Tertiary formations of Oregon and Washington: Univ. of Wash. Pub. in Geology, vol. 5, 1942. (For sale by Univ. of Wash. Press, Seattle, for \$15.00) (Describes and illustrates hundreds of fossil shells of western Oregon)

Schenck, Herbert G., and Keen, A. Myra

California fossils for the field geologist: Stanford Univ. Press, Stanford, California. \$2.00. (Good text book on identifying shells)

Anderson, F. M.

Upper Cretaceous of the Pacific Coast: Geol. Soc. Am. Memoir 71, 1958. (Illustrates Medford area ammonites)

Finds Rock Collector's Gem



TURNER—A piece of petrified wood was found in the Santiam River this week by Spence Gaylor, above, and Melvin Haynes, both of Scio.

Rings of Tree Growth Fairly Clear in Rock

Statesman News Service

TURNER — Unusually large piece of petrified wood was found this week in the Santiam River a mile south of here by two employees of the Stayton Co-op cannery.

Spence Gaylord and Melvin Haynes, both of Scio, found the rock, weighing over 100 pounds, and measuring 21 by 14 inches. It required efforts of both men to remove the stone from the river.

Clearly visible are rings marking the age of the tree before it died.

Gaylor is an amateur rock collector. He is seeking means this week to open the rock without breaking it, since he doesn't own a saw large enough for the work.



ONE OF SEVERAL animal tracks, dating hundreds of thousands to possibly millions of years in age, are to be seen in the exposed surface of an old volcanic mud flow near Drews Gap, about 20 mles west of Lakeview. In this picture, the rear portion of the track probably was made by the animal's front foot, while the larger forward portion with five

distinct claw marks (toward the camera case) would have been made by the rear foot. Authorities in paleontology and geology believe the animal was possibly an arctothere, or short faced bear which then roamed much of the world. (Examiner Photo No. L-597)

Ancient Rock Holds Prehistoric Evidence

The presence of a group of prehistoric animal tracks near Drews Gap holds more interest, in some circles, than the more recent discovery of the "wild-man" tracks said to have been seen in Northern California. The Drews Gap tracks, and the rock formations there, have been the subject of study by geologists and paleontologists from the University of Oregon and Oregon State College and from the State Department of Geology for some time, as they offer another link in the dimming pages of the world's chronology and development.

The tracks, 14 visible sets of them, were discovered in very recent years (about 1945 or possibly earlier) by a rider looking for cattle. They are in the NE $\frac{1}{4}$ of Section 20. T 39 S, R 18 E, on land then owned by George Stevens and leased to W. D. Anderson's Bar H Ranch. The property is now owned by Douglas Tracy and is easily accessible about three-quarters of a mile from Highway 66 along the old Dog Lake forest road which leaves Highway 66 at the Drews Gap summit.

No positive statements have been made identifying the animal which made the tracks, but the possibility has been expressed it may have been an arctothere, a short-faced bear of the late Pliocene or the early Pleistocene periods of geologic time. This could date the tracks at anywhere from a few hundred thousand years ago to as much as 5,000,000 years.

One geologist expressed the following possibility as to the age: "The oldest rocks exposed in the immediate area are similar to those dated by a fossil rhino tooth as lower Miocene. These rocks are overlain, apparently conformably, by a series of pumice tuffs, lake sediments, and agglomerate or mud-flow type rocks. These are then capped by basalt flows. This stratigraphic sequence appears to hold true for most of this area. The rocks in which the tracks are preserved, from their stratigraphic position, are possibly late Miocene or early Pliocene."

This observation could date the tracks as far back as 25 to 30 millions of years.

The rock mass in which the tracks are found was described as follows by Norman Peterson, of Grants Pass, field geologist for the Oregon De-

partment of Geology and Mineral Industries:

"The tracks were made in a thick bed of mud flow, or Lahar (Lahar is a new technical name for volcanic mud flows). Mud flow rocks are made up of angular volcanic fragments in a finer ground mass. They originate on the slopes of a volcano where a variety of volcanic debris is swept down the slopes by water. The mud flows are usually thick, on the order of 50 to 100 feet. Some show that the material has been partially sorted and sometimes a rude bedding is apparent within the rock mass. While this rock mass was still soft and muddy, the animal walked across, leaving his imprints behind. Later, and before the tracks were obliterated, a finer grained ashy material was brought in which filled the tracks. This material may have been either ash that dropped through the air, or settled in very shallow water. At any rate, the mud flow in which the tracks have been preserved is cemented more firmly than the overlaying ash, and as the streams and wind have worn away the rocks, the ash has been removed and the tracks exposed."

The more clear sets of tracks measure about 17 inches long and nine inches across. However, the rear portion of each set appears to have been made by the forefoot of the animal, and the forward portion, with five distinct claw marks, appears to have been made by the rear foot of the animal. This would indicate that the animal, as he walked, overstepped his front foot with his hind foot, as does a bear.

The spacing of the claw marks and other puzzling aspects of the tracks, make the authorities hesitate to definitely identify the animal as an arctothere, or cave bear. However, no other animal of a size or type to make the

tracks is known to have existed during the periods involved in the study.

Phil Brogan, associate editor of the Bend Bulletin, who is a recognized authority in matters of this kind, said: "These arctotheres arose in the Miocene of Eurasia. Possible relatives of these short faced bears were found in the Rattlesnake Pliocene beds of Oregon. The arctotheres migrated to South America in the late Pliocene and Pleistocene, and they left their bones in the Rancho La Brea tar pits of California."

Regardless of the lack of exact placing of the age of the tracks, their age can be imagined as it relates to the age of world, by this statement: In the age of the world, recorded history could be represented by placing a thin dime atop the Empire State building.

A new geologic discovery was made during the past summer by Peterson, who has spent most of the summer here doing geological reconnaissance, attempting to establish the stratigraphic position of the uranium deposits. He found, in the Thomas Creek area, a fossilized tooth which has been identified by Dr. J. A. Shotwell, of the University of Oregon's Museum of Natural History, as an upper premolar of *Diceratherium*, a rhino of John Day Age or lower Miocene. The age of the rhino tooth thus could be 25 to 30 million years. The tooth has been given by Peterson to the UO museum of Natural History.

REPORT ON REFERRED FOSSILS

12/1/58

Locality: SW $\frac{1}{4}$ sec. 27, T. 37 S., R. 18 E.
Northeast slope on southwest side of Thomas Cr.
About 100' of tuffaceous sediments exposed.

Fossils identified:

cf. Salix spokaneensis (Berry) Brown
Quercus cf. columbiana Chaney
cf. Quercus dayana Knowlton
Ulmus cf. speciosa Newberry
cf. Machilus asiminoides Brown

Age:

The fossil leaves from this locality are so poorly preserved that any age conclusions based on them must be considered highly tentative. It is certain, however, that the age falls within the Miocene. Assuming that the fossils are identical to the species to which comparison has been made, the age would appear to be middle Miocene (Hemingfordian). An early or late Miocene age would not be impossible.

Locality: SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, T. 37 S., R. 18 E.
From a baked zone in tuff sediments on both sides of a gabbroic dike and sill.

Fossils identified:

Pinus sp.

Age:

The bio zone of Pinus is late Mesozoic through Recent, and thus little can be said concerning the age.

Locality: NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 34, T. 37 S., R. 18 E.
Thomas Cr. road.

Fossils identified:

Abies sp.
Trapa americana Knowlton

Age:

The one entity identified to species is known from the late Miocene and earliest Pliocene, and it is likely that these specimens fall within the age range.

/s/ Jack A. Wolfe

sent my to Norm Patton 1-2-59

Fossils

October 16, 1958

Mrs. F. A. Cornell
P.O. Box 365
Sweet Home, Oregon

Dear Mrs. Cornell:

We received your letter of October 14 noting that you found a petrified tooth which is very interesting.

For your information identification of vertebrate fossils gives a better age dating generally than identification of fossil leaves and plants. Also if a tooth is in good shape, it is generally quite diagnostic. It could be that your discovery would have considerable scientific interest. I hope that you can give a good location for the point of discovery for possibly if the find is significant, a paleontologist would wish to visit the locality with you.

Dr. J. A. Shotwell of the University of Oregon Museum of Natural History is the authority on vertebrate fossil remains for Oregon. I am sending a copy of this letter to him and I hope that you will either take the tooth to Dr. Shotwell in Eugene or mail it to him so that he might examine it.

You realize, of course, that the value of fossils such as you have recovered is only within the scientific field. It is seldom that they have any monetary value.

Sincerely yours,

Hollis M. Dole
Director

HMD:jr
cc J. A. Shotwell

Sweet Home, Oregon
October 14, 1958

Mr. Hollis M. Dole, Director
State Department of Geology and Mineral Industries
State Office Building
Portland, Oregon

Dear Sir:

Several weeks ago, while hunting arrowheads, I located a petrified tooth and a small piece of bone in a muddy river bank (clay), and would like to have the tooth identified, if possible.

Could you advise me where I might take it for this purpose?

Yours truly,

Peggy Cornell

(Mrs. F. A. Cornell)
P. O. Box 365
Sweet Home, Oregon

*Copy sent to
J. H. Schuchman
10-16-58*

RECEIVED
OCT 14 1958
STATE DEPT. OF GEOLOGY

Fossils

August 4, 1958

Mrs. Arthur Clement
3004 E. 26th Street
Vancouver, Washington

Dear Mrs. Clement:

We received the three entertaining "thingamajigs" you sent, which by the way is a very good name for them, and we have been scrutinizing them with interest.

All three specimens are what you might call "freaks of erosion." They are the remains of fossil-bearing concretions (hard ball-like masses of stone) that were once part of the bed rock (Astoria formation) exposed in the sea cliffs. The concretions were eroded from the cliffs and then rolled around in the surf until they were worn down to their present size and shape. The largest piece contains two kinds of bivalves, one of which is the fluted Anadora (one shell missing), and one gastropod, probably Bruclarkia. The middle-sized piece looks like bone and may be whale or sea lion. The smallest piece defies identification but no doubt there is a small piece of fossil in the center.

The fossils are probably about 20 million years old and represent some of the life in the sea during Miocene time when the Astoria formation was being deposited. You can tell by looking at the fossils that they were buried in fine grey sand which also filled every available cavity. The sand eventually became cemented and turned into the hard gray stone you now see surrounding them.

The "fossil sponge" you mention is believed to be a kind of colony-type sea worm called Serpula. It seems to be fairly common along the beach and probably came from the older marine rocks in the cliffs rather than from the present sea floor.

Thank you for sending the specimens. You are right about their being of no particular value, but I am sure some one of the avid young fossil collectors who visit our Department would be delighted to have them. Enclosed is a report on the geology and fossil localities along Lincoln County beaches.

Sincerely yours,

Margaret L. Steere
Geologist

MLS:lk
Encl.

July 29, 1958.

Oregon State Geologists:

Dear Sirs:

Enclosed are three "thingamajigs" which I picked up at Molok Beach in Oregon. They have been hanging around the house for a couple of years keeping me wondering what the heck they are. I had intended sending them to Mr. Ewart Baldwin of the University at Eugene, but I believe he must have been lost in Mexico.

The three pieces may be of no particular use to anyone, but then again, something which looks like junk to most people could be of extreme value to a geologist who wants to know what makes up the state in which he is living. Can you make sense out of that?

Anyhow, you need not send them back to me. But I am really curious as to what they are and would greatly appreciate any help. The univalve in the large piece is set so that the opening and tail end do not show, making it a little difficult to identify. It seems to resemble the "fig" shells or the Hawaiian "bubble" called Hydatina physis. Are these fossil univalves common along the Oregon coast? I know there are bivalves found in abundance. My husband picked up a very nice pair, firmly fit together.

The middle sized piece is the most puzzling to me; you will notice that in the broad end there is a depression which looks as though there had been an insect or a tiny chiton in there at one time. It certainly is a queer looking thing, - looks almost like grainy wood with stones pressed into it.

The little one is most likely just a cross section of a tree limb or a slice of bone. I wouldn't know. Perhaps it's just a stone.

I'm a shell collector, and while staying at the Table Rock Motel for awhile last year, the landlord gave me a chunk of something which he picked up on the beach. It is light grey in color and resembles a fossil sponge. I would like to know if a fossil sponge would keep its light weight, or would it become heavy? Pardon me if

I sound mixed up! I am! This particular object is about nine inches across and weighs about seven pounds. Probably something common.

An answer would be appreciated, but take your time. There's no rush. And thanks a lot.

Sincerely,

Mrs. Arthur Clement

3004 E. 26th St.,
Vancouver, Washington.

Long Tusk of Prehistoric Mammoth Found by Portlander in Central Oregon



Leonard Kopcinski, 39, World War II marine sergeant, sits with rockhound's hammer and hairy mammoth tusk he discovered near Madras. The tooth is at least 25,000 years old.

An ex-Marine sergeant with an interest in the old days turned up with an ancient objet d'art, or objet d'animaux, Saturday.

The veteran is Leonard Kopcinski. And his find is believed to be a tusk of a hairy mammoth that roamed Oregon about 25,000 or 50,000 years ago.

Kopcinski, 39, went into the field as a "rockhound" about

a year ago. His tusk, or rather the tusk which he discovered, was located east of Madras.

A 2nd Marine Division veteran of four years service during World War II, he now works as an auto upholsterer when not on his diggings.

"I hunt mostly by myself," he said. "I take off into areas of my own choosing."

Tooth Near Surface

Working on the tusk in his rock-filled garage, Kopcinski replied that he found the big tooth (it measures about seven and a half feet) while agate-hunting.

It was in flat ground near the surface in a layer of fine sand, he said. He dug a trench around the aged incisor and cautiously poured a plaster of paris cast.

A resident of 7915 SE Foster Rd., Kopcinski said he had had two experienced men look at his tusk: Lloyd L. Ruff of OMSI and John E. Allen, an economic geologist. Both confirmed the authenticity of his discovery, he said.

A carbon test will be performed soon to determine the age of the tusk more precisely, he said. A "carbon test" involves the use of radio-activity and other scientific devices.

Animal Tall, Heavy

When the hairy mammoth was a nonfossil he measured about 15 feet high at the shoulder, Kopcinski was told. And heavy? "Yes, very heavy," he said.

Oregon in the hairy mammoth days was in the Early Ice Age, Oregonian Correspondent Phil Brogan in Bend, declared.

Brogan explained that the mountains were sheathed in heavy ice, at the time, but the contour of the land was pretty much as it is today.

Kopcinski's discovery? "Oh, it's a good tusk, a good find," Brogan answered. "Many remains have been found in that area (Madras). But a seven and a half foot tusk? It's unusual."

Kopcinski, a mid-week hunter, tucked the tusk back into his garage after an outdoor photo and looked forward to another hunt.

Frank

April 4, 1958

Mr. Cole E. Fraley
Quartzville Road
Foster, Oregon

Dear Mr. Fraley:

We are sending you some issues of our monthly publication, the Ore.-Bin, which contain articles on certain fossil localities in eastern Oregon. There is, however, a great deal of published material on this subject that could be obtained through other agencies or borrowed from the State Library in Salem. Several are suggested below:

Chaney, R. W., 1948, Ancient forests of Oregon: Oregon State System of Higher Education, Eugene. For sale for \$1.00 by University of Oregon Press.

Merriam, J. C., 1938, Published papers and addresses of John Campbell Merriam: Carnegie Inst. Wash. Pub. 500, vol. 1.

Stock, Chester, 1946, Oregon's wonderland of the past - The John Day: Science Monthly, vol. 63, no. 1, July 1946

We hope the material we are sending under separate cover will be of interest to you and that you will write us again if we can be of any further help.

Sincerely yours,

Margaret L. Steere
Librarian

MLS:lk

Quartzville Rd.
Foster, Oregon
April 2, 1958

Dept. of Geology & Mineral Industries
1069 State Office Building
Portland 1, Oregon

Dear Sirs;

Enclosed find \$1.10 for which please send me the following
as per your publications list.

*Sent
4.3.58.*

Mining Laws of Oregon	50¢
Facts About Fossils	35¢
Landforms of Oregon	25¢

I would **also** like to have a copy of the Tenth biennial report of the Dept.
1954-1956. And I would also like to know if you have available the publications
about fossil localities of Eastern Oregon and the fossil localities of Western
Oregon. If you have, I would like to have the prices of these publications.

Sincerely,

Cole E Fraley

RECEIVED
APR 3 1958
STATE DEPT. OF GEOLOGY
& MINERAL IND.

Stamps

October 16, 1957

Prof. William H. Matthews III
Department of Geology
Lamar State College of Technology
Beaumont, Texas

Dear Professor Matthews:

This is to acknowledge receipt of your letter of October 11 and library copy of "First Aid to Fossils". Thank you very much for your prompt attention in returning our publication.

I will look forward to receiving copies of the two research papers which you mention in your letter. Unfortunately we are on a restricted budget and must necessarily keep our exchange list pared right down to the minimum. I therefore am sorry to report that we will be unable to enter into an exchange of publications with you. When our publication on fossil localities in Oregon is printed you will be informed.

Sincerely yours,

Hollis M. Dole
Director

HMD:jr

Lamar State College of Technology

SCHOOL OF ARTS AND SCIENCES

Beaumont, Texas

DEPARTMENT OF
GEOLOGY

October 11, 1957

Dr. Hollis M. Dole, Director
Department of Geology and Mineral Industries
1069 State Office Building
Portland 1, Oregon

Dear Dr. Dole:

*Gave to
Margaret
10-16-57*

I am returning to you under separate cover your loaned copy of "First Aid to Fossils." Thank you very much for the use of this very interesting little publication. I trust that it will arrive safely.

I am very interested in seeing your new publication entitled "Fossile Localities in Oregon" and would appreciate notice of its publication.

I have been in correspondence with most of the geological surveys pertaining to an exchange of publications. Lamar Tech has initiated a series of research publications mostly reprints. At this time I am ^(separate cover) enclosing a copy of the first two papers with this letter. Two more geological papers will be released this year as well as papers on engineering and related fields. I am wondering if you would be interested in participating in this program with us in exchange for your publications. If so, we will be happy to put your name on our exchange list.

Yours very truly,

W H Matthews III

William H. Matthews III
Associate Professor

WHM:ga

Enclosure

RECEIVED
OCT 16 1957
STATE DEPT. OF GEOLOGY
& MINERAL INDS.

September 16, 1957

Dr. William H. Matthews III
Department of Geology
Lamar State College of Technology
Beaumont, Texas

Dear Dr. Matthews:

This is in response to your letter of September 6 requesting our publication, "First Aid to Fossils".

This publication is out of print and consequently we cannot send you a complimentary copy nor a copy that you may have for your files. However we are checking out a copy from our library for you. When this has served your purpose, would you kindly return? A 60-day loan has been accorded you.

Our bulletin on fossils was very popular and had to be reproduced several times. However we felt that it had served its purpose and was in need of revision and therefore have not tried to keep it in print. To replace this bulletin we are currently working on a new publication entitled "Fossil Localities in Oregon". As a preface to this bulletin there is a brief introduction to paleontology and to collecting. It is anticipated that this bulletin will be available to the public within a year. I should probably mention that our fossil localities bulletin will be a popular-type publication.

Sincerely yours,

Hollis M. Dole
Director

HMD: jr
Encl.

Lamar State College of Technology

SCHOOL OF ARTS AND SCIENCES

Beaumont, Texas

September 6, 1957

DEPARTMENT OF
GEOLOGY

Dr. H. M. Dole
Department of Geology and Mineral Industries
1069 State Office Building
Portland 1, Oregon

Dear Dr. Dole:

I am very interested in obtaining a copy of Oregon survey Bulletin No. 18. First aid to fossils, or what to do before the paleontologist comes, by Prof. J. E. Allen.

According to your latest list of publications this item is out of print. I am wondering if I might be able to borrow a copy of this paper from the survey long enough to study it and/or reproduce it. I am doing basic research on a popular book on fossils and I want to be able to include all publications of this type in my bibliography.

I would also appreciate any comments that you might offer as to the popularity of this publication, and how it was recieved by the general public.

Enclosed is my check for thirty five cents for one copy of Miscellaneous Papers No. 3., Facts about fossils.

Any help that you might give me on the above matter will be most appreciated, and please be assured that the material you might send will be handled with care.

Yours very truly,

W. H. Matthews III
William H. Matthews III
Associate Professor

*sent to Dr
9-11-57*

Fossils

September 3, 1957

Mr. Rhobert H. Hober
18305 River Road
Green Acres, Washington

Dear Mr. Hober:

Thank you for your letter of August 29 regarding your interest in fossil collecting.

Under separate cover we are sending you some articles on fossil localities in Oregon, including the John Day region. I am sorry but we have no information on fossil localities southeast of Klamath Falls. It is very possible, however, that fossils have been discovered in that area. There could be fresh-water mollusks that were buried in lake beds during the Ice Age when the lakes of southern Oregon were much larger than they are today. There might also be fossil bones of fish, water-birds, and mammals, but I don't find any definite fossil location mentioned for this region in geologic reports.

I hope you have success in your fossil collecting and that the publications we are sending you will be helpful.

Sincerely yours,

Margaret L. Steere
Geologist

MLS:lk

RECEIVED

AUG 30 1957

STATE DEPT. OF GEOLOGY
INDS.

18305 River Road

Green Acres, Wash.

August 29, 1957

Dear Sirs:

I am a fossil-collector,
and I am interested in fossil-
collecting in your state. Please
send all available information on
Fossils + Localities. Also infor-
mation on John Day fossil fields
+ Little Known fossil fields
Southeast of Klamath Falls.

Your Reply would be most
appreciated.

Yours Truly,
Rhobert H Hober

Fossils

May 2, 1957

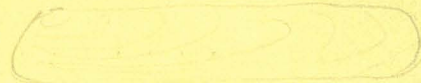
Mr. Bill Wallace
P.O. Box 382
Tillicum, Washington

Dear Bill:

Thanks ever so much for sending the nice little fossils. They certainly are beautifully preserved and I've been having some fun trying to identify them. The little tiny clam is a *Nuculana*. It probably never got much bigger. No,

it isn't a razor clam. Razor clams are shaped like an old-fashioned razor blade

and are about 2 or 3 inches long like this:



They are

called *Solens*.

The larger pelecypod is probably a *Pitar dalli*.



As for the gastropods, the round one that looks like a snail is a *Polinices nuciiformis*.



The tall slender one is a *Turricula*.



And the fatter one is a *Whitneyella*.



I'm not sure about the species of these two gastropods, so am not adding the second name.

Some day soon I'll pack up a few fossils and send them to you. You may be disappointed to find them rather beat up and weathered as compared to the ones you sent.

Thanks again for the nice specimens, and here's to more good fossil hunting.

Best regards,

Margaret L. Steere

MLS:lk

Parts of Mammoth Tusks Found Near Science Museum

Grading Uncovers Remains

Part of the tusks of one of the great imperial mammoths that roamed this area in the ice ages has been uncovered less than 500 yards from Portland's new Oregon Museum of Science and Industry.

Dr. John Allen, head of the geology department of Portland State college, labeled the find "tremendously exciting."

Workmen grading the hillside along SW Canyon road exposed the remains about 100 yards east of the new overpass which will lead to the museum and Portland's new zoo.

One tusk was destroyed and part of a second one was badly damaged before Ronald Croggins, engineering aide of the highway department, recognized whitish material as bone substance.

SATURDAY the area was warming with amateur and professional geologists who worked with picks, shovels



IVORY tusk of giant prehistoric elephant, imperial mammoth, is measured by Dr. John Allen of Portland State

college in ancient clay where it was found near site of Portland's new Oregon Museum of Science and Industry.

Dr. John Allen, head of the geology department of Portland State college, labeled the find "tremendously exciting."

Workmen grading the hillside along SW Canyon road exposed the remains about 200 yards east of the new overpass which will lead to the museum and Portland's new zoo.

One tusk was destroyed and part of a second one was badly damaged before Ronald Scroggins, engineering aide for the highway department, recognized whitish material as bone substance.

SATURDAY the area was swarming with amateur and professional geologists who worked with picks, shovels and small hand tools in a search for more of the extinct member of the elephant family. Included in the party were Dr. Allen, Paul Howell, geologist for the corps of engineers; Lloyd Ruff, vice president of OMSI; Ralph Mason of the state department of geology, and Lon Hancock, recognized as the dean of paleontologists in Oregon.

The men estimated that the mammoth died somewhere between 10,000 and 1,500,000 years ago in the pleistocene era.

PART OF one tusk, seven inches in diameter, poked through the side of a hill some 80 feet below the original surface of the hill. A layer of charcoal was just above the tusk, indicating that the animal may have perished during a prehistoric fire.

Dr. Allen explained that as the ivory dried it would disintegrate unless a preservative was applied.

Mason and Hancock said the exposed section of tusk indicated it belonged to an adult animal.

"We would like to preserve it in place in a glass box, for it would be a real attraction for the Oregon Museum of Science and Industry, but it would never work because of vandals," Dr. Allen said. "They would break the glass and destroy the find."

THE GEOLOGISTS said the area may once have been a swamp and that the hill in which it was found could have been pushed to its present location by glacial action. Support for the swamp theory is the fact that the earth around the tusk is of hard clay.

The imperial mammoth stood about 14 feet high and was covered with long hair. It was the largest of the species. Its tusks were designed for digging and old natives actually thought these animals lived in the ground, the geologists said.

Parts of other mammoths have been found in recent years close to Portland. Oregon is deemed particularly rich in geological finds.

Discovery of Fossil Tooth in Lake County Extends Range for Rhinoceros

By PHIL F. BROGAN

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BEND (Special)—The range of rhinos in Oregon has been extended to the aged, tilted hills of Lake County with a discovery of a fossil tooth in the Thomas Creek area, about 20 miles northwest of Lakeview.

Hollis M. Dole of the State Department of Geology and Mineral Industries, said the find may prove to be the most important paleontological discovery in the old lake region of south-central Oregon in many years. Found by Norman Peterson of Grants Pass, field geologist for the state department, the rhino tooth has been given to Museum of Natural History at the University of Oregon.

The fossil has been identified by Dr. J. A. Shovel, University of Oregon paleontologist, as representatives of the ancient family of rhinos known as the diceratherium, which ranged over John Day and lower Miocene lands of Oregon some 30 million years ago.

These rhinos of ancient Oregon were a horned genus, which followed hornless members of the family of earlier ones. They differed from all other rhinos in the fact that they were equipped with a transverse pair of horns on the nose. Also, the species was quite small and light, in contrast with the larger and heavier animals of earlier ones.

It has been established that members of the rhino family lived in Oregon from dawn age days to the epoch known as the Pliocene, when the barrel-bellied rhino left its bones in clays

near Gateway and other parts of the state.

In John Day times, long millions of years ago when the Cascades were a mere hump on the western horizon, diceratheres were abundant in Oregon. They thrived in such great numbers in one phase of the John Day times that their names have been given to a formation. This embraces the diceratherium beds, where blue John Day clays are buried by the capping Miocene lavas.

The transverse-horned creatures lived in ancient Oregon before the Columbia, Steens and other lavas poured over the eastern part of the state.

In that epoch, most of interior Oregon was an extensive plain, relieved by only a few hills and ridges. Volcanoes were still active, and some of these poured out short flows of lava. But explosive eruptions were far more common than the quiet outpouring of liquid rock.

The ancestral Cascades, at times slumping into the earth under their own great weight, were taking shape just to the west, where the present Cascades shove their peaks into the autumn sky.

Geologists believe that the climate of that distant day was mild and humid. Redwoods were still dominant in the forests, and in their shade grew alders, hazel, dogwood, paperwood and tan oak. Ash, cherry, hackberry and madrone also grew there.

Some 20 years ago, lower Miocene fossils, including those of camels and horses, were discovered in the Summer Lake area of Lake County.