

Sucker Creek Beds, sediments, deposits

Miocene: Eastern Oregon.

D. W. Scharf, 1935, Carnegie Inst. Washington Pub. 453, p. 98-118. Description of a Miocene mammalian fauna from Sucker Creek. The Sucker Creek beds are directly related to Payette formation as shown by the flora and such comparison as can be made between the fossil mammals obtained at Sucker Creek and those from type section of the Payette. Future geologic mapping may show that Sucker Creek beds are an integral part of Payette formation. The beds carrying the fossils consist of fine- to medium-grained pyroclastics, varying from white to green and brown. Presence of fish vertebrae and ostracod shells indicates deposition of at least part of the sediments in body of water.

Occur along lower course of Sucker Creek in eastern Malheur County. Important collecting localities are about 9 miles north of Rockville, Oreg., and about 5 miles west of Oregon-Idaho border.

Sucker Creek beds

Informal

1938

Smith, H. V., Some new and interesting late Tertiary plants from Sucker Creek, Idaho-Oregon boundary: Torrey Botanical Club Bull. v. 65, no. 8

S(221)

T 64

p. 564; Name just mentioned; probably informal.

~~From Univ. of Michigan Herbar. Papers no. 184~~

INFORMAL

Late Tert.

SE Oregon and
Owyhee Co., Idaho?

Sucker Creek local fauna,

1941

Wood, Horace, E. 2nd., R.W. Chaney, John Clark, E. H. Colbert, G. L. Jepsen, J.B. Reeside, Jr., and Chester Stock; Nomenclature and Correlation of the North Amer. Continental Tertiary, Geol. Soc. Amer. Bull. vol. 52, no. 1.

P. 32,

Jan. 1941

apparently in the Payette formation, early Barstovian, Malheur Co., Oregon (Scharf, 1935) p. 99-100

Scharf uses "Sucker Creek beds"
INFORMAL
but no formal description

Miocene

Sucker Creek Fm.

(new)

1962

Kittleman, L. R., Jr., Geology of the Owhee Reservoir area, Oregon: Dissert. Abs., v. 22, no. 12, pt. 1, p.4320

Includes Leslie Gulch tuff mbr. (new).
1600' thick.

Overlain by Jump Creek Rhyolite (new).

Late Miocene

SE Oregon

Sucker Creek Fm.

1962

Corcoran, R. E., and others, Geology of the
Mitchell Butte Quadrangle, Oregon: Oregon
Geological Survey Geol. Map Ser. GMS 2.
Text.

Square 2
Described

Miocene

E. Oregon

Sucker Creek
Payette-Sucker Creek Fm.

1963

Newton, V. C., and Corcoran, R. E., Petroleum
geology of the western Snake River Basin, Oregon-
Idaho: Oregon Dept. Geol. & Min. Res., Oil & Gas
Inv. No. 1

(285)

q0i5i

p. 6

Middle or upper Miocene

Snake River Basin
Oregon-Idaho

Sucker Creek fm.

1964

Baldwin, E. M., Geology of Oregon: Ann Arbor, Mich,
Edwards Bros., Inc.

203(285)

qB19g

Fig. 7 (p. 7)

p. 91, 133, 134

Miocene

Oregon

Sucker Creek fm.

1964

Axelrod, D. I., The Miocene Trapper Creek Flora of southern Idaho: California Univ. Pubs. in Geol. Sci., v. 51.

Tables 1, 8-11, App. 1 (p. 139)

G(276)

p. 68, 70, 71, 73, 90

qUn4

Tertiary

S. Idaho

Sucker Creek fm.

1965

Corcoran, R. E., Geology of Lake Owyhee State Park
and vicinity, Malheur County, Oregon: The Ore-Bin,
v. 27, no. 5.

p. 81-98

U. Mio.

SE Oregon

Sucker Creek Fm. (rank raised)

1967

Kittleman, L. R., and others, Geologic Map of the
Owyhee Region, Malheur County, Oregon: Oregon.
Univ., Mus. Nat. Hist., Bull. no. 8.

incl.

S(285)

Un45b

Leslie Gulch Ash-Flow Tuff Mbr.

U. Mioc.

EC. Oregon

1968

Sucker Creek Fm.

Benson, G. T. and Kittleman, L. R., Geometry
of Flow Layering in Silicio Lavas: Amer. Jour.
Sci., v. 266, no. 4, April. S(200)
p. 265 - 276 Am48

273

Cenoz.

Oreg.

Sucker Creek Fm.

1968

Asher, R. R., Geology and Mineral Resources of a Portion of the Silver City Region, Owyhee County, Idaho: Idaho. Bur. Mines and Geology, Pamph. 138, June.

p. 54-6, Fig. 8C

(283)

P

incl. Leslie Gulch Ash-Flow Tuff Mbr.

U. Mio.

SW. Idaho

Sucker Creek Fm.

1968
pub.

Staples, L. W. and others, Cavansite, a New Calcium
Vanadium Silicate Mineral: in Abs. for 1967, GSA
Spec. Paper 115.

p. 211-212

G(200)
G29sp

U. Mio.

Oreg.

Sucker Creek Fm. (age)

1969

*same as
file with Succor Creek*

*Walker, G.W., Some Comparisons of Basalts of
Southeast Oregon with those of the Columbia
River Group: Columbia River Basalt Symp. #2,
Proc., Mar., p. 223-237
227

201(280)
q C 723p

of Kittleman, '62

M.-U. Mio.

SE. Oreg.

Sucker Creek Fm.

1973

Greene, R. C., Petrology of the Welded Tuff of
Devine Canyon, Southeastern Oregon: USGS PP 797.

p. 1-26

(200)

qB

incl. Leslie Gulch Ash-flow Mbr.

Kittleman & others, '65

Mio.

SE & EC OR

Sucker Creek Fm.

1973

Kittleman, L.R., Guide to the Geology of the Owyhee
Region of Oregon: Oregon Mus. Nat. Hist., Bull. #21.

p. 1-61

S(285)

6 (F. 1)

Un45b

47-varicolored, esp. bright red

50, 53-54-spelling "Sucker Creek" vs. "Succor
Creek" explained

incl. Leslie Gulch Tuff [mbr.]

Mio.

SE. OR

Sucker Creek Fm.

1975

Kimmel, P. G., Fishes of the Miocene-Pliocene Deer
Butte Formation, southeast Oregon: MI Univ., Mus.
Paleont., Pap. on Paleont. 14.

p. 69-87

G(255)

M58p

70

underlies: Owyhee Basalt [Mio.]

K-Ar: 11 m.y. (age of up, Deer Butte)

[Mio.]

se. OR

Sucker Creek fm. (formal proposal)

1965

Kittleman, L. R., and others, Cenozoic stratigraphy
of the Owyhee region, southeastern Oregon: Univ.
Oregon, Mus. Nat. Hist., Bull. no. 1.

p. 6

fig. 4

type sec. desig.

incls. Leslie Gulch ash-flow tuff mbr.

late Mio. (Barstovian)

SE Ore.

Sucker Creek (~~officially rejected~~)

Bureau Land mangmt (BLM) prefers

See Succor Creek

GNC

See correspondence:

R.E. Corcoran

12.66

AS OF 5.11.73

GVC

PREFERRED "SUCKER" GNC ruling

Sucker Creek Fm [to show use]

1968

Shotwell, J. A., Miocene Mammals of southeast Oregon:
OR Univ Mus Nat Hist Bull. 14, Aug (285)
p. 1-67 Un45b
11

incl. Leslie Gulch Ash-flow [mbr]

under: Deer Butte Fm

Mio

se.OR

Sucker Creek Fm.

1970

Walker, G. W., Cenozoic Ash-Flow Tuffs of
Oregon: The Ore Bin, v. 32, no. 6, June.

p. 97 - 115

(285)

100

D30

incl. Leslie Gulch Ash-flow Tuff Mbr.

also see spelling: Succor Creek

Mio.

Oreg.

EC † SE

Sucker Creek Fm.

1971

same as Succor Creek

Sheppard, R. A., Clinoptilolite of Possible
Economic Value in Sedimentary Deposits of the
Conterminous United States: USGS Bull. 1332-B.

p. 1 - 15

5(T.1)

(200)

B

to show use

of Kittleman and others, '65

Mio.

Oreg.

Sucker Creek Fm.

1974

Laursen, J. M. & Hammond, P. E., Summary of Radiometric
Ages of Oregon and Washington Rocks through June 1972;
Isochron/West, NM Bur. Mines & Min. Resources, Bull.
Isotopic Geochron., #9, Apr. G(272)
p. 1-32 qIs72
28

tuff

K-Ar:

18,5⁺¹,7 m.y.

15,4⁺⁰,9 m.y.

Malheur Co
OR

Bowen, R.G. and Blackwell, D.D., The Cow
Hollow Geothermal Anomaly, Malheur County,
Oregon: The Ore Bin, v. 37, no. 7, July. (285)
p. 109-121 D30
110, 116 (F.1), 119 (F.2)

111

(underlies: Owyhee Basalt (M. Mio.)

M. Mio. or older

EC. OR

Sucker Creek Fm [Geog. ext. fr. OR]

1975

Pansze, A.J. Jr., Geology and Ore Deposits of the
Silver City-De Lamar-Flint Region, Owyhee County,
Idaho: ID Bur. Mines and Geol. Pam. 161, Dec. (283)
p. 1-79 P

42(F.16)...corr. ch.

of Kittleman et al, '65 & Asher, '68

equiv. to pt. Silver City rhyolite (Mio.)

under: rhyolite at Owyhee Dam (Mio.)

Mio.

OR, SW ID

Sucker Creek Fm.

1975

Bennett, E. H. II and Galbraith, J. H., Reconnaissance
Geol. and Geochem of the Silver City-South Mtn. Region,
Owyhee Co., Idaho: ID Bur. Mines & Geol. Pam. 162.

p. 1-88 (pl. 1 in pocket)] (283)

8 (F. 4) P

19, 20

altered tuff, volc. ss. & sh.

vitric tuff, arkosic ss., cobble cgl.

U. Mio.

SW, ID

1977

Sucker Creek Fm

Erikson, E. H., Preliminary study of the uranium favorability of Malheur County, Oregon: Bendix Field Eng. Corp. for U.S. DOE, Grand Jct. office, GJBX-91 (77).

P(200)

p.1-14

En27gjbx

6 (T.2)

under: Owyhee Basalt (Mio)

altered volcanoclastic ss, ss, sh

M. (?) Mio.

se. OR

Sucker Creek Fm

1977

Warner, M. M., The Cenozoic of the Snake River Plain of Idaho: WY Geol Assoc Gdbk 29.

p. 313-326 [purpose of study: fuel search]

G(282)

324..summary

qW98f

313..detailed lith

under: Owyhee Rhyolite (Mio)

over: Jarbidge Rhyolite (Mio)

Mio

ne.ID

Sucker Creek Fm (815 m)

1981

Wood, S. H. and Anderson, J. E., Geological,
Hydrological, Geochemical, and Geophysical Investigations
of the Nampa-Caldwell and adjacent areas, southwestern
Idaho: ID Dept Water Resources Bull. 30, part II, Dec.,
Chapter 2..Geology P(283)
p. 9-31 qR24w

17..monotonous brown claystone and siltstone w/ welded
and non-welded ashy tuffs and a basalt flow

18..age based on Barstovian mammalian fossils

under: Owyhee Basalts: 13.6-13.1 m.y.

u.Mio

sw.ID

Sucker Creek Fm [age refined]

1982

Satchell, Loretta, The stratigraphic distribution of broad-leafed and conifer pollen in Miocene volcanic sediments -- a continuous pollen record in the Sucker Creek Formation, Oregon: AASP Ann. Mtg. #14, Abs. of Proceedings (part 1).

p. 291.. age from pollen record based on 60 meter section of tuffaceous siltstones

G(200)
g Am 35a

middle Miocene

ID-OR

Sucker Creek Fm (isotopic age)

1985

Brown, D. E. and Petros, J. R., Geochemistry, geochronology, and magnetostratigraphy of a measured section of the Owyhee Basalt, Malheur County, Oregon: OR Dept Geol and Min Ind, Oregon Geology, v. 47, no. 2, Feb (285) p. 15-20 D30

15, 19..age is determined by Kittleman, L. R., Milhollen, G. I., Leeman, W. T. and Davis, D. A. (in prep) Neogene volcanism and chronology of the Owyhee Upland, nw. Great Basin, OR

under: Owyhee Basalt (14.5 m.y.)

K-Ar: 15.5 m.y.

Mio

ec.OR

Sucker Creek Fm

1986

Scott, D.F., Mineral resources of the Honeycombs study
area, Malheur County, Oregon: USDI, Bur. Mines, Mineral
Land Management (MLA), Open File Rept #30-86 (w/ USGS)
p. 1-26 402(200)
8-9 Un34msi
9..incl. Leslie Gulch Ash-Flow Tuff Mbr which contains
the gemstone "picture jasper"

under: Deer Butte Fm (Mio-Plio)

Mio

ec OR

Sucker Creek Fm [continued use]

1988

Walden, K.D., A stratigraphic and structural study of
Coal Mine Basin, Idaho-Oregon: OR Geol, v. 50, no. 1,

Jan

(285)

p. 8--Abstract

D30

major emphasis of study: composite strat sec of
predominantly volcanoclastic fluvial, lacustrine, and
deltaic sediments called Sucker Creek Fm; meas 265 m; 21
plant and 2 animal fossil zones precisely placed

Mio

Coal Mine Basin

OR-sw. ID