

Temple Butte Limestone¹

Upper (?) Devonian: Northern Arizona.

Original reference: C. D. Walcott, 1889, Geol. Soc. America Bull., v. 1, p. 50.

R. H. Denison, 1951, Fieldiana: Geology, v. 11, no. 5, p. 254. In Upper Devonian (Chemung stage).

T. F. Stipp and H. M. Beikman, 1959, U.S. Geol. Survey Oil and Gas Inv. Map OM-201. Included in stratigraphic section of rocks in northwestern and central Arizona. Upper (?) Devonian.

Named for Temple Butte, 3 miles south of junction of Little Colorado River with Colorado River.

Temple Butte limestone.

Devonian (Upper ?) : Northern Arizona (Grand Canyon).

C. D. Walcott, 1889 (Geol. Soc. Am. Bull., vol. 1, p. 50). *Temple Butte ls.*, 0 to 94 ft. thick, of Dev. age. Underlies Redwall ls. (Carbf.) and overlies Tonto in Grand Canyon of the Colorado but is in places entirely absent, either through erosion or nondeposition, and where absent Redwall ls. rests on Tonto group.

N. H. Darton, 1910 (U. S. G. S. Bull. 435). *Temple Butte ls.*—Purple and cream-colored ls. and ss., 0 to 100 ft. thick.

Named for Temple Butte, 3 mi. S. of junction of Little Colorado River with Colorado River.

Temple Butte Ls.

1961

Maxson, J. H., Geologic history of the Bright Angel
quadrangle: Grand Canyon Natural History Assoc.
col. 1, 3

Devonian

Arizona

Temple Butte Ls.

1962

Wilson, E. D., A résumé of the geology of
Arizona: Ariz. Bur. Mines Bull. 171
Comprehensive bibliography keyed to discussion
Precambrian correl. chart p. 8 402(274)
Ar⁴

p. 22, 29

Upper? Devonian

Arizona

Temple Butte Ls.

1963

*McKee, E. D., Nomenclature for lithologic subdivisions of the Mississippian Redwall Limestone, Arizona: U.S. Geol. Survey Prof. Paper 475-C

200

p. C21-C22

qB

Underlies Whitmore Wash Mbr. (new)
of Redwall Ls.

Devonian

N. Arizona

Temple Butte Ls.

1964

Koons, Donaldson, Structure of the Eastern Hualpai
Indian Reservation, Arizona: in Arizona Geol. Soc.
Digest, V. 7, Nov.

P. 100

G(274)

qAr4d

Devon.

N. Arizona

Temple Butte-Elbert Fm. (strat. ext.)

1965

Munger, Robert D. and others, Pre-Pennsylvanian Stratigraphy of the Kaiparowits Region, South-Central Utah and North-Central Arizona: in Utah. Geol. Soc. and Intermountain Assoc. Petroleum Geol., Guidebook No. 19, Geology and Resources of South-Central Utah.

P. 17, 19 (Redwall restricted) 203(273)
ut12g

incl. McCracken Ss. facies

Devon.

SC. Utah - NC. Ariz.

Temple Butte Ls.

1967

Poole, F. G. and others, Devonian of the South-
western United States: Canada. Alberta Soc.
Petroleum Geologists, Internat. Symp. Dev.
System, Calgary, v. 1, (D.H. Oswald, ed.).

p. 879-912

887

335

qIn8p

U. Dev.

NC. Ariz.

Temple Butte Ls.

1967

Beal, M. D., Grand Canyon The Story behind the
Scenery: K C Pubs., Flagstaff. (monograph)

590(274)
qB362g

p. 22

Paleoz.

N. Arizona

Temple Butte ls.

1967

Maxson, J. H., Preliminary Geologic Map of the
Grand Canyon and Vicinity, Arizona, Eastern Section:
Grand Canyon Nat. Hist. Assoc., scale 1:62,500.
(Sheet 1 of 3 : East)

Dev.

NC, Arizona

Temple Butte Ls.

1968

Hamblin, W. K., and Rigby, J. K., Guidebook to the
Colorado River, Part I: Lee's Ferry to Phantom
Ranch in Grand Canyon National Park: Brigham
Young Univ., Geology Studies, v. 15, pt. 5.

p. 184
16

G(273)
B76rs

Four Corners
area

Temple Butte Ls.

1968
revised from 1961

Maxson, J. H., Geologic Map of the Bright Angel Quadrangle, Grand Canyon National Park, Arizona: Grand Canyon Nat. Hist. Assoc., Scale at 1:48,000.
(USGS & Nat. Park Service don't recognize formal subdiv. of Precamb. time.)

text on reverse side to show use

Dev.

Ariz.

Temple Butte Ls.

1969

McKee, E. D., Stratified Rocks of the Grand Canyon:
in The Colorado River Region and John Wesley Powell:
USGS PP 669.

(200)

p. 23-58

qB

37

U. Dev.

NC. Ariz,

Temple Butte Ls.

1969

McKee, E. D. and Gutschick, R. C., History of the
Redwall Limestone of Northern Arizona: GSA Mem. 114.

p. 1-726

15, 24

G(200)

G29m

U.(?) Dev.

n. AZ

Temple Butte Ls.

1971

Irwin, J. H., Stevens, P. R., & Cooley, M. E.,
Geology of the Paleozoic Rocks, Navajo and Hopi
Indian Reservations, Arizona, New Mexico, &
Utah: USGS PP 521-C.

(200)

p. 1 - 32

qB

10(T.1)

4

Grand Canyon

SE. Utah

NW. N.M.

NE. Ariz.

Dev.

Temple Butte Fm (700'-1200')

1973

Beus, S. S., Devonian Stratigraphy & Paleogeography
along the Western Mogollon Rim, Arizona: N. Arizona
Mus., Bull. #49.

S(274)

p. 1-36

F59b

1, 3, 4 (T. 1), 12

red or purple-red-gray dol & ss

Dev.

NW. AZ

Temple Butte Ls. (max. +300 m.)

1974

*McKee, E.D., Paleozoic Rocks of Grand Canyon: GSA,
Rocky Mt. Sec., Gdbk. #27, pt. 1.

p. 119-154

G(200)

137, 138-age

qG3rf

140 (F. 9)

purplish

U. Dev.

N. AZ

Temple Butte Ls [geog ext to UT fr ~~NV~~ ^{AZ}]

1975

Hintze, L. F., Geological Highway Map of Utah:
Brigham Young Univ Dept Geol, Geol Stud Sp Pub 3.
[detailed rept: only little-used names picked up]
[scale at 1:1,000,000]

mapped w/Crystal Pass Dol

under: Redwall Ls (Miss)
over: Muav Ls (Camb)

Bryce & Zion Canyons

Dev

UT

Temple Butte Ls

1976

Grand Canyon Nat. Hist. Assoc. (Breed, W.J.;
Billingsley, G.H.Jr.; Ford, T.D., et al), Geologic
Map of the Grand Canyon National Park, Arizona:
N. AZ Mus., Map at 1:62,500.

under: Redwall Ls (Miss)
over: Muav Ls (Camb)

M(274)2
G762g

Dev

n. AZ

TEMPLE BUTTE LIMESTONE

1976

New age: late Middle or early Late Devonian

Former age: Late(?) Devonian

Arizona

Elston, D.P., and Bressler, S.L., 1976, Correlations of basal Cambrian and Devonian sedimentary rocks, central and northern Arizona, in Geological Survey research 1976: U.S. Geol. Survey Prof. Paper 1000, p. 158.

Age changed from Late(?) Devonian to: late Middle or early Late Devonian.

M. or U. Dev.

AZ

Temple Butte Limestone (age changed)
uppermost Middle(?) and lower Upper Devonian
Arizona

1977

Elston, D. P., and Bressler, S. L., 1977, Paleomagnetic poles and polarity zonation from Cambrian and Devonian strata of Arizona: Earth and Planetary Sci. Ltrs., v. 36, no. 3, p. 423-433.

Age changed from late Middle or early Late Devonian to: latest Middle(?) and early Late Devonian.

209

Ea 76

U. Mi(?) and U. Dev.

AZ

Temple Butte Fm

1978

Billingsley, G. H., A synopsis of stratigraphy in the
western Grand Canyon: Museum of Northern Arizona, MNA
Research Paper 16 330(274)
p. 1-27 B496s
6(Fig.5), 7(Fig.6), 7, 10(Fig.9)

under: Redwall Ls (Miss)

Dev

nw.AZ

Temple Butte Fm

1980

Beus, S. S., Late Devonian (Frasnian) Paleogeography and
Paleoenvironments in northern Arizona: SEPM, Rocky Mtn
Paleogeog Symp 1, June (Fouch & Magathan, eds.) 362(270)
p. 55-69 R598p

58(F.3)..correl ch and age

68..summary

62-64

correl w/ Jerome Mbr, Martin Fm (U.Dev)

M to U.Dev

w. Grand Canyon
n.AZ

51
Temple Butte Ls [geog ext]

1980

Hintze, Lehi H. (compiler), Geologic Map of Utah:
UT Geological & Mineral Survey, scale 1:500,000.

(purpose: to update, since 1963, state use of stratig
names in Utah)

mapped w/ Muddy Peak Ls

Dev

UT

Temple Butte Fm (lith variation)

1988

*Holm, R.F., Geologic map of San Francisco Mountain, Elden Mountain, and Dry Lake Hills, Coconino County, Arizona: USGS Misc. Inv. Map I-1663

12..here designated as Fm rather than Ls in study area, as unit consists of dol, sh, & some cgl; only upper 47 m exposed

Dev

nc. AZ

Temple Butte Ls (State usage)

1988

Reynolds, S.J., Geologic Map of Arizona: AZ Geol Survey
(produced in cooperation with USGS) Map #26, scale
1:1,000,000 (1"=16 mi); 1 sheet M(274)2
(67 references; several are unpub maps/theses) 1988r

[age generalized for mapping purpose at this scale]

[Dev]

Camb-Miss

n. AZ