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A Navajo-English thesaurus of geological terms

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New Mexico Geological Society Guidebook, 54th Field Conference, Geology of the Zuni Plateau, 2003, p. 103-107.

A NAVAJO-ENGLISH THESAURUS OF GEOLOGICAL TERMS

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Abstract.— A bilingual Navajo-English thesaurus of selected common geological and related terms is presented here for the use of geoscientists and geoscience educators who work on or near the Navajo Nation, or who have an interest in Navajo ethnogeology.

INTRODUCTORY NOTE

Most people who are not fluent speakers of the Diné (Navajo) language find it difficult to enunciate; and, as Navajo was predominantly an oral language until the mid-20th Century (Acrey, 1994), many fluent speakers do not read or write it. As these issues cannot be addressed in this thesaurus, those interested in learning more about the language are encouraged to consult the comprehensive grammar and dictionary by Young and Morgan (1987), the abridged dictionary by Austin and Lynch (1983), or to contact the Center for Diné Studies at Diné College, Shiprock, New Mexico.

COMMON GEOLOGICAL AND RELATED TERMS IN ENGLISH AND NAVAJO

Abalone shell	diichiłí
Adobe	bis
Agate	tsé bee nátseeł
Air	níłch'i
Alcohol	tó łikoní
Alkaline	łeeyáán, táánií'
Aluminum	béésh 'ádaaszóólígíí, béésh 'ászólí
Amber	tséjéé'
Ammonia	'azee' yílchʔʔhígíí
Aragonite	hadahoniye'
Arroyo	bikooh, cháshk'eh
Arsenic	béésh łibáhá
Asteroid	sǫ' astse'
Astronomer	sǫ' neiłkaahiis
Astronomy	sǫ' naalkaah, yádiłhił bee hadilyaaígíí naalkaah
Atmosphere	niłch'i
Azurite	'adishtł'ish
Bark	ahásht'óózh, 'akásht'óózh
Blue ochre	tsé bee diiltł'ish
Bluff	deez'á
Bone	ts'in
Boulder, large rock	tsétsoh
Brass	béésh łitsoii
Bronze	béésh łichí'ii
Butte	dahaską, tsélání, tsé si'ą
Canyon	tsékooh, tséyi'
Carbon dioxide	níłch'i díí'idígíí
Career	hanaanish, hanaanish bee iiná ájíł'íinii, naanish bee iiná nijiiłdeełii
Caves (Rock)	tsé'áán, tsénií'
Celestial space	yá'ąąsh
Cell	hinááh ats'íís yee hadít'éii dóó yee hináníígíí
Cement	tsé náádleehí, tsé nádleehí
Clay	bis, hashtł'ish dits'idí
Clay (Blue)	bis dootł'izh
Clay (Red)	bis łichxí'í, łeezh łichxí'í
Clay (White)	dleesh, bis łigaaí, łeezh łigaaí
Cliff	tsé ńt'i'í
Clouds	k'os
Clouds (Dark)	k'osdiłhił
Coal	łeejin, tsékǫ'
Coal mine	łeejin haagéód, tsékǫ' haagéód
Coal miner	łeejin haigédí
Coke	łeejin bit'éézh
Combustible	łikon
Comet	sǫ'tsoh jóhanaa'éí yináalwołígíí
Concrete	tsé nádleehé
Concretions or fossils	tsé dínísé
Constellation	sǫ'łání
(Big Dipper) Ursa Major	náhookǫs bika'
Cassiopeia	náhookǫs bi'áád
Contaminate	'ahídiich'aał
Contamination	'i'niiyą́ą́'
Copper	béésh łichíi'ii
Copper ore	tsé bibéézhłichí'í
Coral (Red)	tséłchíí', yoo'łichí'í
Corrosion	tó béésh yiyą́ągo
Corundum, carborundum, whetstone	tsé béésh bee daak'aashígíí
Crater	háádahazts'aa'
Crest	bighą́ą́'
Crevice (in the rock)	tsék'iz
Crystal	tséghádi'nídínii
Crystalline (as clear water)	niłtólí, niłts'ílí
Crystalline basement rocks	ni'bitłááh tsé nít'i'
Dam	be'ek'id, dá'deestł'in
Dark (ness)	chahałheeł
Dawn	hayoołkááł
Decay	diłdzííd, dííłdzid yileeh
Deposit (e.g., coal, ore)	hadadeeskǫ'
Dew or dewdrop	adah too', dahtoo'
Dike (Mafic)	tsézhin 'íí'áhí, chézhin 'íí'áhí
Ditch, canal, trench	łeeyi'ígeed, tó yígeed, yíldzis
Domed (laccolithic) mountain	dził náhooziłii
Dry (area)	hóółtseii
Dry (climate)	náháltsááh

Dust łeezh, bé'éshjoł, łeezh dibahí
Dust level łeezh dahoojoł ánéelt'e'ígíí
Earth nahasdzáán, ni', ni'asdzáán, ni'hasdzáán, nihosdzáán, ni'hosdzáán, ni'nahasdzáán, nohosdzáán
Earth's atmosphere nahasdzáán bii níłch'ih
Earth's core nahasdzáán biiniih, nahosdzáán bijéí
Earthquake ni' naha'náni' nihi'nááh, ni'náhidi'nááh, ni' ndaha'nánígíí
East ha'a'aah
Electrical discharge atsiniltl'ish k'aa'
Electrical storm 'dilch'il, n'dilch'il
Electricity atsiniltł'ish
Elevation dah, hódah, wódahgo
Ellipse názbąsgo heeneez
Energy bee adziilí, bee hwiinéíyígíí
Environment bee ahéédhool'áii, bee hahodít'éii, bee hoł hahodít'éii, ináhaazláii
Environment and ecology hózhǫǫgo iiná
Enzyme ats'íís yee nooséłígíí
Erosion (by wind and water) tó dóó níyol 'ooshasígíí
Erosion of layered rocks yizhosh
Erupt (lava from a volcano) hada'nilghaash
Explode deesdǫǫh, diishdǫǫh
Explosive dildon
Extract biyi'dęę' hahagéedgo, biyi'dęę'hahalyéego, biyi'ęę' hajiiléego
Fall aak'eego, aak'eeh
Fault 'a'át'e', bąąhági 'át'éii, ba'át'e'
Fire kǫ'
Flammable łikon
Flesh 'atsį'
Flint or arrowhead béésh, béésh ast'ogii, tsé'áwózí
Fog 'ááh, 'áhí
Folding of rocks (gentle) 'ahąąh niilyé
Food chain ch'iiyáán, ch'iiyáán nídanidlíinii, ch'iiyáán nídoodleełii
Frost shoh
Galaxy sǫ' dah naas jaa'ígíí, yá diłxił honí'áán
Geology tsé na'alkaah
Geologist ni' bitł'áahdi 'ahoot'éii ndeiłkaahígíí, tsé ndeiłkaahígíí
Geometrical Figures ałhida'diidzo dóó nída'asdzoígíí
(obtuse angle) ałhi'diidzo
(triangle) táá'góó yistł'ah
(base) ayaadi ídzooígíí
(acute angle) hááhideeneezgo yistł'ah
(square) dik'ą́
(side) bááłk'iiz, bíighahgi
(circle) násbąs, nímaz
(diameter) ałníí' góne' ídzo, ałts'ą́ądzo
(center) ałníí'
(radius) ałníí' dóó bibąąhjį' ídzooígíí, tsin sitąh náhásbąs
(section) bits'át'ánígíí
(arc) názhahgo ídzooígíí
(circumference) abąąh ahéé'ídzooígíí
(oval) hááhideeneez
(rectangle) heeneez
(diagonal) nish'náádęę'go naanii dóó yaago ídzo
(apex) dahats'os
(right angle) nish'náájígo ídzo
(right triangle) táa'go yistł'ah
(hypotenuse) nishtł'adęę'go naaniigo dóó yaago ídzo
Glucose ch'iyáán náálkąąd bee jiinánígíí
Gold óolaa
Gravel, small stones tsézéí, tsé yázhí
Gravity óhonaa'éí bii' tsa'jilgish bikąą'
Ground ni', łeeshtah
Ground level nihookáá, nohokáá
Groundwater łeeyi'to, tó biyáázh, tóháálį
Gypsum dleesh, łeezh łigaaí
Gypsum (Crystalline, Selenite) tséts'agí
Hammer bee atsidí
Hail ńló
Heat bee dahoozdo, hado, niishgááh
Heavy water tó nidaaz
Helix hahoots'ee'
Hematite or Red Ochre chííh
Hexagon hastą́ągóó 'adeez'á
High elevation hááhdi shíį, hódah, hót'ááh, yát'ááh
Hogback tsé yik'áán
Hopi Buttes Volcanic Field tsézhin bii'
Horizon (below ground line) ník'ashbąąh
(above ground line) yák'ashbąąh
Hurricane tónteel bikaah níyoltsoh
Ice tin
Iodine 'azee' 'adiłidí, 'azee' 'adiłidí łizhinígíí
Iron béésh dootł'izh
Iron (cast) béésh dit'ódí
Iron ore chííh dootł'izh, tsé ndaaz
Jet (black gemstone) bááshzhinii
Lake be'ek'id, tó dah siyį
Land kéyah
Landslide hodichįįh
Lava, trap rock, malpais tsézhin, chézhin
Lava flow (viscous, congealed) tsézhin ndaneezhyęęzhí
Lava plug, volcanic neck tsézhin 'íí'áhí, chézhin 'íí'áhí
Lead béésh dilyíhí, béésh dit'óódígíí, dilyįhí
Lead concentrations béésh dootł'izh tó bitahgóó ánéelt'e'ígíí
Lead contamination béésh dootł'izh bilááhgóó tó bitah silį́į'go
Leaf 'at'ąą'
Life 'iiná
Light 'adinídíín
Lightning ashgish, 'atsiniltłish
Lignite łeejin
Limestone (burnt; quicklime) tsé díílid
Lines da'ídzo
(straight line) k'éhézdongo ídzo
(perpendicular lines) náhástł'ahgi ałhida'diidzo

(curves) názhahgo nida'asdzo
(parallel lines) ałhąąh da'ídzo
Liquid tó, bito'
Lunar eclipse ooljéé' daaztsą́
Magnesium béésh 'ászólí, béésh łikoní
Magnet, magnetic iron béésh ná'iiláhí
Malachite 'adishtł'ish
Map kéyah be'elyaaígíí
Measurement 'í'neel'ąąh
(depth) íídéetą́ą́'
(height) deigo ánízáád
(width) naaniigo áníłnéézz
(length) náasjigo áníłnéézz
Mercury (metal) béésh tózháanii
Mesa dah 'azką́
Metal béésh
Metal (Corrugated) béésh doolk'oolí
Meteor sǫ́ náádiilwo'ígíí, sǫ' naalts'id, sǫ' nanidéehígíí, sǫ' nídílwo'
Meteor Crater 'adah hosh laní
Mica tsét'ágí, tséts'agį
Milky Way yikáísdáhí, yikáíh łees'áán yílzhódí 'akáísdáhí
Mill tsé yik'á, tsé yik'á bił haz'ą́ągo
Milling (Uranium) łeetso tsé dóó łeezh bąąh haalk'áahgo
Mine ha'agéédd, ha'agéédd bá haz'ą́ągo
Mine (underground) ni'bitł'áahdi na'asgeedígíí, nohosdzáán biyi' di na'asgeed
Mine (surface, open pit, strip) bą́ą́' dígéédd, ni' éí doodago nohosdzáán bikáá' dóó bą́ą́' dígéédd
Mine (shaft) 'a'áán
Miner ha'agédí, haigédí
Mineral ni' bitł'áahdi hólónígíí, nohosdzáán bii' bił haz'ánígíí, t'áadoo le'é łeeyi' dahólónígíí
Minerals (ground for ceremonial use) tsé yik'áán
Mineralogist, Mining Engineer ni' bitł'áahdi hólóonii ndeiłkaahígíí
Mining ha'agéédd bi'oonishgo, ha'agéedgo
Mining industry ha'agéédd bił dahda'ínéédh
Mist, spray tózhool
Molten, melted (it is) díítłhíį'
Monolith, rock spire tsé 'íí'áhí
Moon ooljéé', tł'éhonaa'éí
Moon (crescent) 'ooljéé' dah yiitą́', 'ooljéé' dah yiitįįh
Moon phases ooljéé' łahgo ánáá'niił
(first quarter) hanibąąs
(full moon) haníibą́ą́z
(last quarter) chahałheeł nádááh
(new moon) dah yiitą́
Mountain dził
Mud hashtł'ish
Narbona (Copper) Pass béésh líchíi'ii bigiizh
Natural gas níłch'i łikoní
Navajo Volcanic Field tsézhin 'íí'áhí
North náhookǫs
Obsidian noolyínii
Ochre (Black) łeejin, tsékǫ'
Ochre (Blue) tsé bee diiltł'ish
Ochre (Red) chííh
Ochre (Yellow) łeetso, łeetsoii
Oil ak'ah
Olivine (Peridot) tsé dootł'izhii
Orbit binádáál, yinádáál, yináalwoł
Outer space yágháhookáán, yáhoníkáán
Oxidize yiijíįh
Oxygen niłch'i yá'át'éehii
Peridot (Olivine) tsé dootł'izhii
Petrified wood tsé nástáán
Petroleum tókǫ'í
Petroleum Geologist tókǫ ndeiłkaahígíí
Petroleum Geology tókǫ na'alkaah, tsé na'alkaah
Pick 'ałts'ą́ą́' deeníní
Pinnacles hók'ą́ąh , tsé'íí'á, tsé nít'i'
Planets kéyah yádiłhił bii' dahólónígíí
Plants nanise'
Plateau ch'íhiní'ą́, dah 'azką́
Platinum béésh łigaii 'láahdi 'íłíinii
Pollution 'i'niiyą́ą́'
Propane gas níłch'i łikoní
Public water systems tó yá'át'éehii diné bá hóló̧o̧go óolzinii
Pumice 'asootse', tasootse'
Quarry tsé haha'níłídí
Quartz tsé'áwózí, tséghádi'ńdínii
Radiation hatsoo'alghak'aa', hatsoo'alghhałk'aa', łeetso ba'áte', łeetso bideezla' éí doodago tsa'jilgish
Radiation (Solar) jóhonaa'éí bii' tsa'jilgish bi'áád
Radiative bideezla' hóló̧o̧go
Radioactivity bideezla' na'alkidgo
Rain nahałtin, níłtsą́
(female rain) níłtsą́ bi'áád
(male rain) níłtsą́ biką'
(misting) níłtsą́zhool
Rainbow nááts'íílid
Rainwater niłtsą́too'
Reclamation hasht'éehálnéehgo
Respect hoł nilį
Reverence jidísin
Risk báhádzidgo hohodidooł't'ihii hóló̧o̧go, hohodidooł't'ihgo, t'áadoole'é ba'át'e' hóló̧o̧go
Rivers, creeks, and washes tó dahníłínígíí
Rock tsé
Rock (in a rock, inside corner, rincon) tsétł'áh
Rock (depression or concavity on the surface) tsé'édzis
Rock (overhanging ledge) tséyaa hatsoh
Rock (struck by lightning) tséghádinídéél
Rock moss tsé bąąh 'aghaa'ígíí
Rockslide tsé náázhoozhí
Rocky place tsétah
Rubber jeeh dígházii
Rust ńdiniichxííh
Sacred Mountains dził dadiyinígíí
Sacred space hodiyiin

Sand séí
Sandstone tsé dizéígíí
Sandstone (Popping; typically Cretaceous rocks that can explode if used in sweat lodges) tsé dildǫ́'í, tsé dildǫ́'ii
Sandstone (Red) tséłchíí'
Sandstone (White) tséłgaii
Scoria 'asootse', tasootse'
Sea, ocean, large lake tóniteel, tónteel
Sea level (___ft above sea level) tónteel bikáá'dóó deigo 'adées'eez
Sea Shell (White) yoołgaii, yoo'łigaii
Seashore tónteel bibąąhgi
Sediment 'atł'áshjáné
Sedimentary rocks (layered or thick stack) 'ałnáozt'i'
Ship Rock (Diatreme neck) tsé bit'a'í
Shovel łeezh bee hahalkaadí
Silver béésh łigaii
Sky yáh
Sky (blue or dark) yádiłhił, yák diłhił
Skyline, horizon yánineel'ą
Soil or Dirt łeezh, ni'hokáá'
Soil (sub) łeeyí'
Soil (conservation) kéyah bił k'íhwíínée'niił, kéyah baa 'áháyáájí
Solar eclipse jóhonaa'éí daaztsą́
Solar system kéyah jóhonaa'éí binaákahígíí
Solid (as a rock) niłdzil
Solid figures nida'asdzooígíí
(pyramid) dik'ąągo heets'óóz
(cylinder) níyiz
(cube) dik'ą́
(cone) níyizgo heets'óóz
Solstice shá niighááh
Sound 'íits'a'
Sound (going through water) tóniil
South shádi'ááh
Spring daango
Star sǫ'
Star (Morning/Evening) sǫ'tsoh, sǫ'tsoh łigaii
Star (shooting; meteor) sǫ' ndaajeehí, sǫ' yilwoł
Steel béésh dootł'izh
Stone tsé
Stone (Porous) tsé diyilí
Stone (Red) tséłchíí'
Stone (White, ceremonial) hadahoniye' łigai
Stone flint (to make fire) tsétł'éél
Strata (flat rocks forming a step pattern) hadook'įh
(thin sheets of rocks stacked) 'ałk'idook'įh
Summer shį́įgo
Sun jóhonaa'éí, shá
Sunbeam or sunray shábitł'óól
Talc, talcum powder tsé'éjihí
Tailings séí éí doodago łeezh łeetso bąąh haal'éelgo
Tar jeeh łizhiní
Telescope bee adéest'į́į'
Terrestrial nihookáá' naaldeehii
Tin, tinfoil béésh dildǫ'í, béésh kágí
Tornado or hurricane naats'ó'oołdísii, níyoltsoh
Total t'áá 'át'ęgo, 'ahióóltą'go
Toxin or poison k'aasdá
Turquoise dootł'izhii
Universe yádiłhił bii' bił haz'ánígíí
Up slope niinah
Uranium łeetso, łeetsoii
Uranium ore tsé łeetso bitahígíí
Uranium mill łeetso haalk'ááh, łeetso yik'á
Uranium mill operation łeetso yik'á bina'anish ałkéé' honí'ą́
Uranium miner łeetso haigédí
Valley or Plain halgai, 'adzoogai, dadzígai, dzígai, ndzisgai, téél
Vapor or steam siil
Volcanic neck tsézhin 'íí'áhí, chézhin 'íí'áhí
Warm honeezílí, neezílí, sizílí
Wash (Arroyo) cháshk'eh
Water tó
Water (Alkaline) tódík'ǫ́ǫzh
Water (Ground) łeeyi'to, tó biyáázh, tóhaáląį
Water (Heavy) tó niidaaz
Water (Sacred) tó 'ałchiní
Water (Spring) tó biyáázh
Water (Surface) tooh
Water sample tó haakąągo bee tó naalkaahígíí
Water service line, pipe materials béésh tó bii'danilínígíí
Water standards (for drinking) tó daadlánígíí bibeehaz'áanii
Water treatment tó hasht'eelnéél, t'áadoole'é doo yá'át'éehii nahgóó bąą kól'į́igo
Wave (on water) tó bíishghaán yilk'oołígíí
(an area) hodoolk'ool
Wave (Heat) hadahoneestiin
Wave (Ocean) tó náádadiidáhígíí, tó yilk'oołígíí
Weather t'áá ákwííjį́ níłch'ih 'ał'ąąh 'ánáánílígíí
Weight das, 'ázníldáás, hadas, dah 'adidloh, 'í'níldáás
West 'e'e'aah
Whirlpool tó ná'oołmasígíí
Wind níyol
Winter hai, haigo
Wood tsin
Work naanish

Year nááhai, yihah

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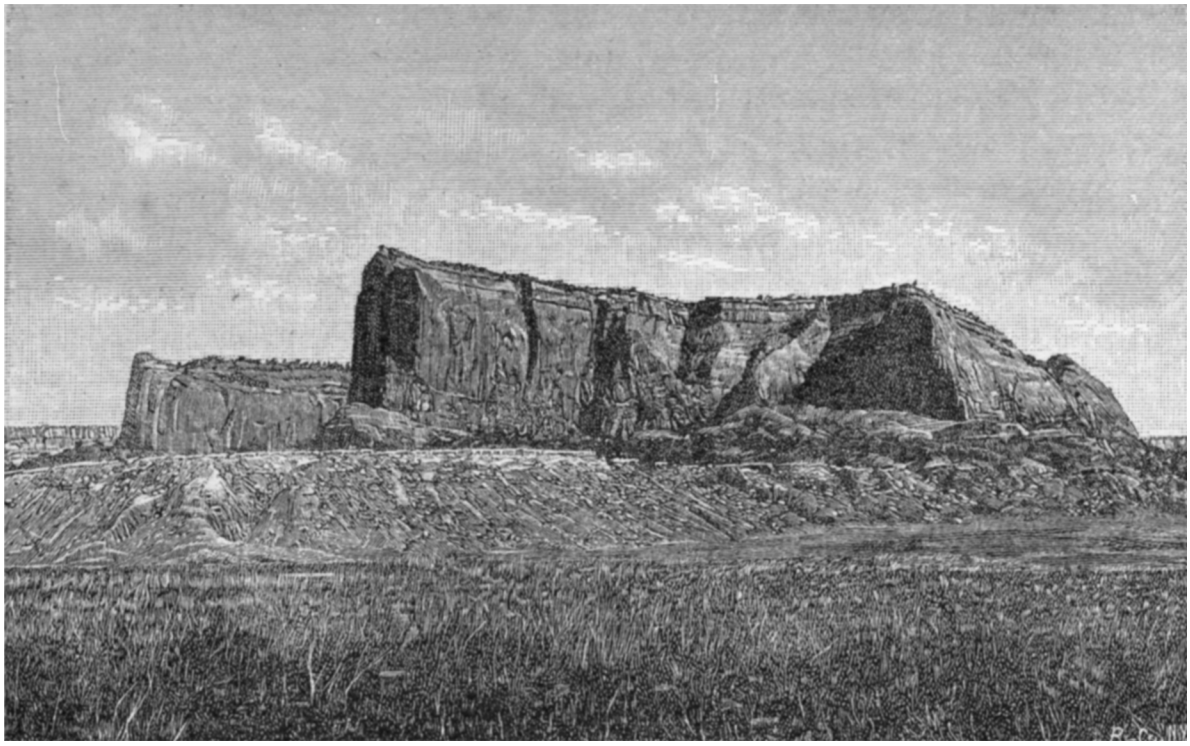
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Dutton's (1885, fig. 1) woodcut photograph of the Wingate Sandstone, described as "Wingate sandstone; the equivalent of the Vermillion Cliff sandstone of southern Utah."