UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PRELIMINARY BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL
DEPOSITS OF HONDURAS

by

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INTRODUCTION

This bibliography was created to gather geoscience references pertinent to minerals, both metallic and non-metallic, in Honduras. The U.S. Geological Survey's Center for Inter-American Mineral Resource Investigations (CIMRI) collects and distributes information for all of South and Central America, as well as the Caribbean and Mexico. Geoscientific research and economic interest in Latin America increases each year and this list of references should facilitate work by the mineral and geoscience industries.

This bibliography includes references on mines, mineral deposits, seismology, tectonics, paleontology, volcanology, geochemistry, geology, and geophysics in and near Honduras. Unpublished literature and theses were included whenever possible. References pertaining to hydrology, botany, zoology, agriculture, or forestry were not included except where these disciplines may used to supplement information on mineral deposits.

Because many studies cross national borders, several references are regional in scope. These include pertinent works on the Pacific Ocean, Caribbean Ocean, Mexico, and Northern South America as well as the countries that share a common border with Honduras. Studies of the stratigraphy from southern Mexico, Belize, and Guatemala are included because the work, which was initiated by oil company's exploration efforts, is more complete. Bathymetry references for both coasts are included because many structures can be traced using topography to areas well off-shore. Geochronology from throughout Central America was included where available to help interpret the timing and emplacement of several features and events related to metallogeny in Honduras.

This bibliography is considered preliminary because an exhaustive literature search has not been completed and a number of references, particularly in the "grey" literature, are undoubtedly missing. The bibliography is complete enough that anyone wishing to review the progress of work in the geosciences relating to minerals in Honduras since Karl Sapper's pioneering work in the late 19th century should find it a convenient source.

The bibliography was compiled using Papyrus version 6.0.6 and includes search, group sorts, keyword, and other options for locating items of interest. It was processed using Microsoft Word version 5.5. Microsoft Word also has search and sort capabilities. A copy of the bibliography in Microsoft Word format (Honduras.doc file) is available upon request.
Aeroservices Division, 1986, Interpretation report, airborne magnetometer survey, Honduras, Central America: Houston, TX, Aero Services, Inc., Western Geophysical Company Survey 85-6, 125 p.; For the Director General de Minas e Hidrocarburos, Honduras.

Aguilar Paz, J., 1954, Mapa general de la República de Honduras: Instituto Geográfico Nacional de Honduras, scale 1:500,000; Tegucigalpa.


--- 1913, Central America in 1912: Engineering and Mining Journal, v. 95, p. 139.

--- 1914, Central America in 1913: Engineering and Mining Journal, v. 97, p. 140.


--- 1916, Central America in 1916: Engineering and Mining Journal, v. 101, p. 120.


--- 1937, Mapas que acompañan al informe detallado de la comisión técnica de demarcación de la frontera entre Guatemala y Honduras: Comisión técnica de demarcación de la frontera entre Guatemala y Honduras, scale 1:25,000.


--- 1963, Municipio de Guanaja, Departamento de Islas de la Bihia: Instituto Geográfico Nacional, scale 1:42,000.


--- 1963, Municipio de Utila, Departamento de Islas de la Bahía: Instituto Geográfico Nacional, Tegucigalpa, Honduras, scale 1:60,000.


--- 1965, Honduras: Indice anotado de los trabajos aerofotográficos y los mapas topográficos y de recursos naturales: Pan American Union.


--- 1968, This month in Mining (Honduras): Engineering and Mining Journal, v. 169, p. 121; Moramulea Mines Inc.


--- 1970, This month in mining (Honduras): Engineering and Mining Journal, v. 171, p. 120.

--- 1972, Geología y Mineralogía del Estudio de Cuencas Multinacionales, Golfo de Honduras, Golfo de Fonseca y Río San Juan: Guatemala City, Guatemala, Instituto Centroamericano de Investigación y Tecnología Industrial, 117 p.

--- 1972, The geology of western Nicaragua, in Tax improvement and natural resources inventory project, Nicaragua: Managua, Nicaragua, v. 4, p. 221.


--- 1972, Chinandega, Nicaragua and Honduras: Catastro e inventario de recursos naturales, Nicaragua ND 16-14 Map plate IV-3D, scale 1:250,000; March.


--- 1974, El Mochito field trip: IV Reunión de geólogos de América Central, Tegucigalpa.

--- 1974, Excursión Post-Congreso: IV Reunión de Geólogos de América Central, Tegucigalpa.

--- 1974, Mapa geológico general de la República de El Salvador: Federal Institute for Geosciences and Natural Resources, Germany, and the Centro de Estudios e Investigaciones Geotécnicas, El Salvador geologic, scale 1:500,000.

--- 1974, Gold in Honduras and where to find it: Engineering and Mining Journal, v. 175, p. 17.


--- 1976, Gold mining in Honduras: World Mining (San Francisco), v. 29, p. 76.


--- 1977, Honduras recent drill holes at El Mochito mine may increase San Juan orebody reserves: World Mining (San Francisco), v. 30, p. 166.


--- 1980, Mapa general Republica de Honduras, 8th ed: Instituto Geografico Nacional, scale 1:1,000,000; UTM projection.


--- 1983, Honduras: Central Intelligence agency, scale 1:1,500,000; Lambert conformal conic projection.

--- 1985, Honduras: Central Intelligence agency, scale 1:3,600,000; relief map shown by shading.


--- 1988, Central America and the Caribbean: Central Intelligence Agency, scale 1:12,500,000.

--- 1989, Central America and the Caribbean: Central Intelligence Agency, scale 1:2,500,000.


--- 1965, Informe de la Primera reunion de geologos de America Central: Guatemala City, Guatemala, C.A., Instituto Centroamericano de Investigation y Tecnologia Industrial (ICAITI), 49 p.

--- 1971, Mapa geologico regional; NW Honduras: Direccion General de Minas e Hidrocarburos geologic, scale 1:250,000.


--- 1972, Chinandega, Nicaragua; Honduras: Catastro e Inventario de Recursos Naturales, Managua, Nicaragua Geologic Map ND 16-14; Lamina IV-3D, scale 1:250,000.


Avila, F.C., Tappmeyer, D.M., Aves, H.S., Gillett, M.F., and Klenk, C.D., 1984, Recent studies of basins are encouraging for future exploration in Honduras: Oil and Gas Journal, v. 82, p. 139-149.


Binig, C., 1983, Stratigraphy and structure of the Gulf of Honduras and Swan fracture zone: Eos, Transactions of the American Geophysical Union, v. 64, p. 832; AGU fall meeting; AGU fall meeting, San Francisco, CA, Dec. 5-9, 1983.


--- 1984, Some aspects of structural geology of La Buena Fe Cave: Journal of the Tennessee Academy of Science, v. 59, p. 87; Abstracts of papers presented at the
spring collegiate meeting; Tennessee Academy of Science; Tennessee Academy of Science; spring collegiate meeting, 1984.

Bohnenberger, O.H., 1978, Data sheets of the post-Miocene volcanoes of the world: Rome, Italy, IAVCEI.


Burkart, B., and Self, S., 1983, Extension and rotation of crustal blocks along the Northern American-Caribbean plate boundary in Central America [abs.]: Eos, Transactions of the American Geophysical Union, v. 64, p. 832.


Burn, R.G., 1969, The Pis-Pis gold mining district of NE Nicaragua: Mining Magazine, v. 120, p. 169-175.


Butterlin, J., 1977, Geologie structurale de la region des Caraibes (Mexique; Amerique Centrale; Antilles; Cordillere Caraibe): Paris, France, Masson.


--- 1982, Crustal influence on magmatic diversity along the Central American Volcanic front [abs.]: Eos, Transactions of the American Geophysical Union, v. 63, p. 460.


--- 1975, Geologic framework of the Caribbean region, in Geology, geophysics and resources of the Caribbean: Kingston, Jamaica, IDOE, p. 3-26.


Damon, P.E., and Coney, P.J., 1983, Rate of movement of nuclear Central America along the coast of Mexico during the last 90 M.A: Geological Society of America, Abstracts with Programs, v. 15, p. 553; The Geological Society of America, 96th annual meeting; The Geological Society of America, 96th annual meeting, Indianapolis, IN, Oct. 31-Nov. 3, 1983.


Deleboryas, T., and Srivastava, S.C., 1981, Jurassic plants from the Department of Francisco Morazán, central Honduras: v. 34, p. 345-357.


--- 1981, Jurassic plants from the Department of Francisco Morazan, central Honduras: Review of Palaeobotany and Palynology, v. 34, p. 345-357.


--- 1966, Estructura geológica, historia tectónica de América Central, in Contributions to the II Reunión de Geólogos de América Central: Guatemala.


--- 1973, Estructura geológica, historia tectónica y morfología de América Central [2nd ed.]: Mexico, Buenos Aires, Instituto Centroamericano de Investigación y Tecnología Industrial (ICAITI), Centro Regional de Ayuda Técnica, 52 p.


--- 1984, Sequential skarn formation and mineralization within the lower San Juan ore body and associated Mantos, El Mochito mine, Honduras, Central America [abs.]: Geological Society of America, Abstracts with Programs, v. 16, p. 278.


Dirección General de Minas e Hidrocarburos, 1971, Mapa geológico regional, NW Honduras: Dirección General de Minas e Hidrocarburos Honduras, mineral resources investigation, scale 1:250000.
--- 1976, Informe del programa de exploracion geoquimica regional de la parte Oeste del Departamento de Olancho: Tegucigalpa, Honduras, Secretaria de Recursos Naturales, 60 p.


--- 1956, Geology of southern British Honduras, with notes on adjacent areas: Belize City, British Honduras, Belize Government Printer, 85 p.


--- 1971, Cuadrángulo Zambrano: Instituto Geográfico Nacional geologic, scale 1:50,000.


--- 1970, San Juan de Flores Quadrangle: Instituto Geográfico Nacional de Honduras Geologic map of Honduras, scale 1:50,000; Tegucigalpa, Honduras.


--- 1974, Mapa geológica de la República de Honduras: Dirección General de Minas e Hidrocarburos, Instituto Geográfico Nacional de Honduras, and Banco Nacional Fomento Geologic map of Honduras, scale 1:500,000; Tegucigalpa, Honduras.


--- 1983, Montana de Comayagua structural belt; Neogene rejuvenation of a Laramide wrench fault as a dextral transform to the Honduras Depression: Geological


Everett, J.R., and Fakundiny, R.H., 1976, Structural geology of El Rosario and Comayagua Quadrangles, Honduras, Central America: Publicaciones Geológicas del Instituto Centroamericano Investigación Tecnología Industrial, v. 5, p. 31-42; Guatemala, C.A.


Fakundiny, R.H., and Everett, J.R., 1971, Metallogenetic provinces and epochs in southern Central America: Mineralium Deposita, v. 6, p. 77-88; Berlin, Germany.

--- 1976, Metamorphic and intrusive rocks of the El Rosario and Comayagua Quadrangles, Central Honduras: Publicaciones Geológicas del Instituto Centroamericano Investigación Tecnología Industrial, v. 5, p. 71-77; Guatemala City, Guatemala, C.A.


Feigenson, M.D., Carr, M.J., and Raczek, I., 1985, Strontium and neodymium isotopic systematics of Central American volcanics [abs.]: Eos, Transactions of the American Geophysical Union, v. 66, p. 422.


Ferrusquia-Villafranca, I., 1984, Brief account of Cenozoic vertebrate paleontology in Middle America in Origin and evolution of the Cenozoic vertebrate fauna of Middle America: Journal of Vertebrate Paleontology, v. 4, p. 187-198.


Fisher, R.L., 1961, Middle America trench; topography and structure, v. 72, p. 703-720.


--- 1959, Oro de Mosquitia—a geological and engineering report on the gold deposits in certain sections of the Mosquitia Coast jungles and Department of Olancho, Republic of Honduras, Central America: Santa Fe, New Mexico, S.H. Glassmire and Associates, 14 p.


--- 1989, The Chortis Block; a raft of Mesozoic sediments and Cenozoic volcanics on a solid foundation: Geological Society of America, Abstracts with Programs, v. 21, p. 12; Geological Society of America, South-central Section, 23rd annual meeting; Geological Society of America, South-central Section, 23rd annual meeting, Arlington, TX, Mar. 12-14, 1989.


--- 1980, Evidence for a tectonic discontinuity in Nicaragua [abs.]: Eos, Transactions of the American Geophysical Union, v. 61, p. 946.


--- 1977, Paleomagnetic results from Cretaceous sedimentary rocks in Honduras; tectonic implications: Eos, Transactions of the American Geophysical Union, v.


Haas, F., 1945, Malacological notes, IV; Late Pleistocene nonmarine mollusks from Honduras: Fieldiana, Zoology, v. 31, p. 3-4.


Hodgson, G., 1971, Geología y anotaciones mineralógicas de la planicie noroeste y de la Precordillera Occidental [abs.]: Catastro e Inventario de Recursos Naturales, Div. Geol., Arch. Accesible Informe, v. 13, p. 112; Managua, Nicaragua, C.A.


Holcombe, T.L., 1975, Caribbean Bathymetry and sediments, in Geology, geophysics, and resources of the Caribbean: Kingston, Jamaica (Mayaguez, P.R.), IDOE workshop on geology and marine geophysics of the Caribbean region, p. 27-62.


--- 1976, Laramide plutons on the landward continuation of the Bonacca Ridge, Northern Honduras: Publicaciones Geológicas del Instituto Centroamericano Investigación Tecnología Industrial, v. 5, p. 84-90; Guatemala, C.A.

--- 1976, Preliminary K-Ar age data from the Laramide Sierras of Central Honduras: Publicaciones Geológicas del Instituto Centroamericano Investigación Tecnología Industrial, v. 5, p. 91-98; Guatemala, C.A.


Hugh, K.E., 1976, La geología en la planificación metropolitana; el caso del plan de desarrollo metropolitano del Distrito Central. Translated title: The geology of metropolitan planning; the case of the plan of metropolitan development of the Central District, Tegucigalpa, Honduras: Publicaciones Geológicas del Instituto Centroamericano Investigación Tecnología Industrial, v. 5, p. 172-176; IV Reunión de geólogos de America Central, June 23-28, 1974.


--- 1979, The geologic history of the Swan Islands, Honduras: Texas Christian Univ.,


Jacome, V.E.O., 1982, Fate of fertilizer nitrogen as affected by soil pH, soil water content,
and plant residue in a Florida Ultisol and three soils from the Sula Valley,
Microfilms.

James, N.P., and Ginsburg, R.N., 1975, Facies and fabric specificity of early subsea
cements in shallow Belize (British Honduras) reefs:, v. 7, p. 790; The Geological
Society of America, North-central Section, 9th annual meeting, Waterloo, Ont.,
May 5-17, 1975.

James, N.P., Ginsburg, R.N., Marszalek, D.S., and Choquette, P.W., 1976, Facies and
fabric specificity of early subsea cements in shallow Belize (British Honduras)
reefs:, v. 46, p. 523-544.

Jones, W.R., 1924, The recent discovery of cassiterite in British Honduras: Mining

Karim, M., Chilangar, G.V., and Hoylman, H.W., 1966, Northeast Nicaragua oil and gas
indications: World Oil, p. 84-96; March.

Kempner, W., Luyendyk, B., and Cockerham, R.S., 1976, Magnetic stratigraphy of the
Point Sal ophiolite; The nature of the oceanic crust: Eos, Transactions of the
American Geophysical Union, v. 57, p. 404.

Kennedy, D.S., 1974, Structural control of the El Mochito ore bodies; El Mochito,
Honduras: Rosario Resources unpublished report, 18 p.

private geologic, scale 1:250,000.

Kesler, S.E., 1971, Nature of ancestral orogenic zone in nuclear Central America:

Kesler, S.E., and Bateson, J.H., 1970, Structural equivalence of the Maya and Macal
groups, British Honduras; key to the late-Paleozoic stratigraphy of nuclear
Central America: Geological Society of America, Abstracts with Programs, v. 2,
p. 595-596.

Kesler, S.E., Bateson, J.H., Josey, W.L., Cramer, G.H., and Simmons, W.A., 1971,
Mesoscopic structural homogeneity of Maya series and Macal series, Mountain
Pine ridge, British Honduras: American Association of Petroleum Geologists

Kesler, S.E., Kienle, C.F., and Bateson, J.H., 1974, Tectonic Significance of Intrusive
Rocks in the Maya Mountains, British Honduras: Geological Society of America


Knowlton, F.W., 1918, Relations between the Mesozoic floras of North and South America; v. 29, p. 607-614.


Knutson, S., 1988, Sumidero of the Rio San Jose de Atima; the 1987 NSS expedition to Honduras; v. 46, p. 320-326.


--- 1976, Relative motions of South America with respect to North America and Caribbean tectonics, v. 87, p. 969-976.


Lazo, J.E., 1893, Naturaleza geologica, in Primer anuario estadistico correspondiente al ano de 1889: Tegucigalpa, Republica de Honduras, p. 5-6.


Ledbetter, M.T., 1985, Tephrochronology of marine tephra adjacent to Central America:, v. 96, p. 77-82.


--- 1978, Domains of tectonic rotation; paleomagnetic evidence from the western Caribbean; v. 59, p. 271; American Geophysical Union; 1978 spring annual meeting, Miami Beach, Fla., April 17-21, 1978.

--- 1979, Cenozoic Caribbean paleogeography; plate tectonic and paleomagnetic constraints: Geological Society of America, Abstracts with Programs, v. 11, p. 470; The Geological Society of America, 92nd annual meeting, San Diego, Calif., Nov. 5-8, 1979.


Mann, P., and Rosencrantz, E., 1988, Fault termination effects of a large-offset transform; intergration of marine and onshore data from the western Cayman Trough: Eos, Transactions of the American Geophysical Union, v. 69, p. 1449.


Markle, S.W., Cuffey, R.J., and Fonda, S.S., 1979, Modern reefs and bryzoans off Port Royal, eastern Roatan, Honduras; v. 11, p. 43; The Geological Society of America, Northeastern Section, 14th annual meeting, Hershey, Pa., March 1-3, 1979.


--- 1976, A 87Sr/86Sr reconnaissance of the Lake Yojoa Volcanic Field, Honduras: Publicaciones Geológicas del Instituto Centroamericano Investigación Technología Industrial, v. 5, p. 99-106; Guatemala, C.A.


Mohl, J., 1969-70, Geologica y Geoquimica de las areas: Concordia, Orica, Guaype, La Union, y El Dictamo: ASARCO geologic and geochemical, scale 1:30,000, 1:50,000, & 1:100,000.


Müllerried, F.K.G., 1936, Estratigrafía preterciaria preliminar del estado de Chiapas: Boletín Sociedad de Geológicos Mexico, v. 9, p. 31-41.


National Geographic Society (U.S.) Cartographic Division, 1986, Central America: National Geographic Society, scale 1:2,534,000.


Paz Rivera, N., 1962, Reconocimiento geológico en la cuenca hidrográfica de los Ríos Coco y Bocay: Boletín Servicio Geología Nacional de Nicaragua, v. 6, p. 5-22; Managua.


--- 1972, Diapir-like features offshore Honduras; Implications regarding tectonic evolution of Cayman Trough and Central America;, v. 83, p. 1911-1922.


1975, Structural evolution of the Honduras continental margin and the sea floor south of the western Cayman Trough:, v. 86, p. 830-838.


Pope, K.O., 1984, Late Holocene environment change in the Ulua Valley, Honduras; reconstructions from geomorphological, soil, and archaeological data [abs.]: Geological Society of America, Abstracts with Programs, v. 16, p. 625.


Prouty, R.W., 1938, Central America, aspects that present themselves to a visiting engineer: Engineering and Mining Journal, v. 139, p. 47-49.


--- 1921, The Isthmaian oil fields of Mexico: Boletin Petroleo de Mexico, v. 11, p. 293-303.


--- 1899, Ueber Gebirgsbau und Bogen des nördlichen Mittelamerika [-H ed.]: Petermanns Mitt., v. 27, 119 p.

--- 1905, Ueber Gebirgsbau und Boden des nördlichen Mittelamerika: Petermanns Geog. Mitt., v. 32, p. 82.


Schafersman, S.D., 1974, Carbonate sediments and foraminifera of patch reefs, Glovers Reef, British Honduras (Belize); v. 6, p. 939-940.


Simmons, W.A., 1972, Stratigraphy and Sedimentation of the Paleozoic Rocks in the Maya Mountains, British Honduras: Louisiana State, Master's thesis.


Simonson, B.M., 1976, Igneous petrology of the Minas de Oro Quadrangle, central Honduras: Publicaciones Geológicas del Instituto Centroamericano Investigación Tecnología Industrial, v. 5, p. 78-83; Guatemala, C.A.


--- in press, New lithologic evidence for mid-Cretaceous subduction beneath Honduras, Central America:.


--- 1975, Gold in Honduras - where to look for and find it: World Mining (San Francisco), v. 28, p. 31-70.


--- 1984, Overview of the mineral resource potential of Latin America in relation to global tectonic and metallogenic controls, in Parameters controlling the distribution of large ore deposits, ore clusters, mineral belts and metallogenic provinces, II of Global Tectonics and Metallogeny: International Association on the Genesis of Ore Deposits, Commission on Tectonics of Ore Deposits, v. 2, p. 213-256.
--- 1985, La potencialidad de los recursos minerales de América Latina: Geomimet, v. 133, p. 23-60; Asociacion de Ingenieros de Minas, Metalurgistas y Geologos de Mexico.


The Tenderfoot Quien Sabe, 1916, Correspondence and discussion; Experience of a prospector in Honduras: Engineering and Mining Journal, v. 101, p. 1118-1119.


USAID, 1966, Resources Inventory Center: Corp. of Engineers resources, scale 1:1,000,000.


Vaughn, T.W., 1918, Geologic history of Central America and West Indies during Cenozoic time; v. 27, p. 615-630.


Wassall, H.W., III, 1959, Geological bibliographies, 1785-1955 -- Bahama Islands:.

Watanabe, J., 1974, Geology and copper mineralization of the Cordillera of Hispaniola: Mining Geology (Japan), v. 24, p. 323-333.


Weaver, J., 1975, Geology, Geophysics, and resources of the Caribbean: Kingston, Jamaica (Mayaguez, P.R.), Report of the IDOE workshop on geology and marine geophysics of the Caribbean region and its resources, 15 p.


-- 1970, Geologische Bilder aus Mittelamerika: Natur u. Museum, v. 100, p. 120-128, 269-278, & 362-370; Frankfurt/M.

-- 1974, El desarrollo paleogeográfico de América Central: Boletín Asociación Mexicana Geólogos Petroleros, v. 25, p. 374-424; Mexico, D.F.

-- 1978, Magmatismus und metallogenese in Mittelamerika: Münster. Forsch. Geol. Paläont., v. 44/45, p. 43-85; Münster (Westf.).


-- 1974, Guatemala field-trip guidebook: SEPM-GCAGS.
