

CONTRIBUTIONS OF FRANK G. SPECK (1881-1950) TO ETHNOBIOLOGY

RALPH W. DEXTER
Department of Biological Sciences
Kent State University
Kent, Ohio 44242

ABSTRACT.—F.G. Speck, a naturalist-ethnographer, was a specialist on the Indians of Eastern North America. Forty eight studies (about 1/5 of his publications, including three books) were devoted to ethnobiology exclusively or as a primary concern and many other papers included such information incidentally. Major studies involved the Beothuk and Micmac of Eastern Canada, the Naskapi of Labrador, and the Penobscot of Maine. He studied material culture, resource utilization and preservation, methods of hunting, trapping, fishing, etc., family hunting territories, food, medicinal uses, and animal folklore among such Indian groups as the Algonkian, Huron, Six Nations, Wampanoag, Delaware, Rappahannock, Catawba, Houma, etc. and the Eskimo of southern Labrador. His major contribution was the detailed study of family hunting territories and their ecological importance in the economy of these native peoples. Originally he believed such a system was pre-Columbian, but later was convinced that the practice probably developed after contact with Europeans and their demands for the fur trade coupled with game cycles and periodic game scarcity.

INTRODUCTION

In his essay on the history and scope of ethnobiology, Castetter (1944) pointed out that the science of ethnobiology is more than the study of utilization of renewable resources and is equally concerned with the total biological environment and interactions between man and plant and animals. Frank G. Speck (1881-1950), trained by Franz Boas, was an American ethnologist who gave much attention to studies in ethnobiology. Biographical accounts of Speck have been published by Wallace (1949), Mason (1950), Witthoft (1950), Hallowell (1951), and Dexter (1954). As a specialist on the Eastern Indians of North America, Speck published 247 papers in that field (1903-1952), 48 of which involved some phase of ethnobiology in which plants and animals are a major concern and many others in which they are mentioned incidentally. We might say Speck was a "naturalist-ethnographer," since in addition to his works on ethnology he published 15 articles on natural history (1898-1946). These were mostly on herptiles and birds for which he had a life-long interest. Originally he had planned to become a naturalist. As a young man he worked with and became a protege of the famous herpetologist Raymond L. Ditmars, and vertebrates played a prominent part in his later studies on ethnobiology. Wallace (1951) gave a good review of Speck and his field methods.

MAJOR ETHNOGRAPHICAL WORKS

Speck published three books of comprehensive scope which contain extensive notes on ethnobiology. The first was *Beothuk and Micmac* (1922). He included a section on hunting territories in Nova Scotia, Cape Breton Island, and Prince Edward Island established by the Micmac-Montagnais of Newfoundland. His second and third books were devoted to the Naskapi hunters of Labrador (1935a) and Penobscot Man of Maine (1940a). These, too, were much concerned with methods of hunting and utilization of natural resources.

MATERIAL CULTURE AND UTILIZATION STUDIES

One of Speck's earliest and most persistent investigations concerned utilization of plants and animals. (Dates without names refer to Speck.) Birch-bark (1910, 1928a,

1931) for many uses such as canoes, house coverings, cooking vessels, dishes, and baskets was naturally included, but he pointed out that contrary to common belief it was not used to shape pottery. Other utilizations included feathers and moose hair for decorating clothing and moccasins, and deer, moose, and caribou skin for making moccasins and coats. Utensils of many types and wampum belts were made from plants and animals by the Huron of Quebec (1911a, 1911b). He published special reports on the use of wampum for ornamentation, as a medium of exchange, and eventually for ceremonial purposes by the Eastern Algonkians (1916, 1919). Two very special wampum belts given to William Penn by the Delawares and the Six Nations during negotiations for land were described by Speck and Orchard (1925). He reported on, with artistic explanation, the feather art and hair ornaments of the Sioux in South Dakota (1928b). Sealskin preparation in Labrador was included among other topics for studies on Eskimos and Indians in southern Labrador (1935-1936). He described the use of ivory and bone for art, ornaments, and implements for the Eskimo of northern Labrador and Newfoundland (1927a, 1940b) and in eastern Pennsylvania (1930).

Speck made a special study of gourds and their utilization by Southeastern Indians of the United States (1941a, 1941b, 1948-49). These inventive peoples found uses for gourds as rattles, drums, musical instruments, containers, lamp stands, candle holders, emblems, implements, dippers, cups, toys, games, and medicines. He listed 35 traits and functions served by gourds for 13 different tribes of the Southeast.

STUDIES ON FOOD

Speck and Dexter (1946, 1948, 1951, 1952) published a series of reports based primarily on wild plants and animals utilized as food along with several incidental uses of some of the food organisms. They included uses of marine mollusks by the Houma Indians of Louisiana, utilization of marine life by the Wampanoag Indians of coastal Massachusetts, and of biological resources by the Micmac and the Malecite Indians (also called Etchemins) of New Brunswick, Canada. In addition to food, some plants and animals were important to these peoples as bait, ornaments, beads (wampum), implements, utensils, games and medicines.

RESOURCE PRESERVATION AND HUNTING TERRITORIES; HUNTING ACTIVITIES

As a naturalist, as well as an ethnographer, Speck was much interested in game preservation, hunting territories, and conservation measures in general. Many studies were devoted to these topics, and they became his major contribution to ethnobiology. Some early papers were devoted to general matters of conservation. He pointed out that Indians were the "best protectors of the game" and that "... the increase *only* is consumed" (1913). Although this has not proved to be universal, it has been true more often than not. In a paper published for students of birds (1938a), he pointed out the Indian's "understanding of the need of sustaining the balance of nature," and consequently the numerous regulations developed for taking plants and animals. Vecsey and Venables (1980) have pointed out that "as much as anyone, Speck fostered the idea of Indians as lovers and conservers of nature."

Many of Speck's papers were devoted to family hunting territory. These studies detailed the hunting systems of many bands of the Algonkian groups such as the Micmac, Timiskaming, Dumoine River, and Kipawa (1915a, 1915b), also, the Timagami band of Ojibwa in northern Ontario, and the Mistassini of Labrador (1923a). Later studies were involved with the Wabanaki, Malecite, the Lake St. John Montagnais, and neighboring bands of New Brunswick, the Hurons of Lorette in Quebec, and the Wampanoag, Massachusetts, and Nauset Indians of Massachusetts (1926, 1927b, 1927c, 1928c, Speck and Hadlock, 1946) and the Labrador Eskimo and Indians (1936, Speck and Eiseley, 1942).

In a review paper by Speck and Eiseley (1939), the authors defended the system of family hunting territories as being pre-Columbian, but, after a thorough study of the matter, Leacock (1954) concluded that family hunting territory came after settlement by Europeans. Hickerson (1967:313-314) pointed out that "Speck concluded that family or individual rights to land characterized aboriginal, even ancient property relations. . . . Speck's hypothesis proved to be the cornerstone of a general theory of the particularity, or 'atomism' of Algonkian collectors." But Hickerson continued, "In opposition to the idea that the family hunting territory system was aboriginal among northern Algonkians, Jenness asserted in 1932 that the Athabascan Sekani had developed their family property system in historical times, following the practice of the White trappers." Hickerson agreed with Jenness. Wallace also reviewed Speck's theory and concluded that, "Speck—simply assumed that such a system of ownership and planned exploitation was reasonable, considering the nature of the game and the physical contact with European traders. He was challenged on this assumption very frequently" (Wallace 1968:22). These writers, however, were unaware that Speck had already changed his mind. In a letter Speck wrote to Julian H. Steward, dated 22 January 1940, he admitted that family hunting territories were not "archaic" nor "pre-Columbian", but probably developed as an ecological consequence after contact with Hudson Bay Co. fur buyers, and experience with game cycles and the scarcity of game.¹ While Speck's *theory* on the origin of family hunting territories was incorrect, his detailed studies of the practice in historic times are a major contribution to ethnobiology.

Several studies were devoted to methods of taking game and fish. He described the use of dogs by the Montagnais and Naskapi (1925), and their methods of skindressing for the major mammal and bird skins taken in Labrador compared with the Eskimo of coastal Labrador (1937a). The use of blow guns by the Catawba in the southeastern U.S. is given as well as method of hunting and fishing with a seasonal chart (1938b, 1946a). Hunting and trapping techniques for mammals, and fishing methods for seafoods by the Houma Indians of Louisiana (1943), and for the Rappahannock of Virginia (Speck, Hassrick and Carpenter, 1946) are described in detail. Rabbit drives by the Nanticoke of Delaware, Catawba of South Carolina, Pamunkey, Powhatan, and Rappahannock of Virginia are also described (1946b, Speck and Schaeffer, 1950). Eel pots and their construction by the Nanticokes were studied in detail (1949).

NATIVE MEDICINE: HERBALS

Medicinal uses have been one of the major concerns of ethnobiologists. While Speck was more concerned with ecological aspects of natural resources, their acquisition, and family hunting territory systems than in medical practice, he did include that aspect in certain cases. In his study of the Algonkians he recorded utilization of plants for medical purposes by the Penobscot, Montagnais, Micmac, Mohegan, and Nanticoke groups (1917). In his study of the Catawba of the Carolinas he described the gathering, preparation, and administration of medicines for 14 different illnesses. Roots and leaves of certain herbs were used for cures, as well as a few animal parts, especially from snakes and turtles (1937b, 1944). Merrell (1983) has recently given an excellent appraisal of Speck's work, published and unpublished, among the Catawba. He wrote, "Speck collected almost 100 curative items that could cope with everything from backache and boils to warts and worms," and concluded that the "Catawbans derived most of these remedies from local plants, demonstrating once again that ancient, intimate knowledge of the natural world" (Merrell 1983:252).

In his study of the Houma Indians of Louisiana he compiled an annotated list of 73 species of plants and their medicinal uses (1941c), and did much the same for the Rappahannock of Virginia (Speck, Hassrick and Carpenter, 1942). His last study in that direc-

tion concerned an Indian Medicine-man named Joe Pye in eastern Massachusetts who cured fever with an herb now commonly called Joe Pye Weed (Speck and Dodge, 1945a).

ETHNOHERBETOLOGY: ETHNOORNITHOLOGY

Reptiles and birds, as noted earlier, held a special fascination for Dr. Speck, and he combined this interest in natural history with his studies in ethnography. A special paper on bird-lore was devoted to such studies among the Penobscot, Malecite, Micmac, and the Abenaki. He learned that about one-third of the names of birds were derived from their utterances, while the remainder were derived from descriptions of the bird (1921). A similar study on reptile-lore among these northern Indians, and including the Naskapi, was published two years later (1923c) and a general paper on the knowledge of amphibians and reptiles by the Cayuga of Ontario was published by Speck and Dodge (1945b). He gave special attention to the native and colloquial English names for snakes, turtles, lizards, frogs, and toads, and fables concerning them, in the culture of the Catawba and Cherokee of Piedmont, North Carolina (1946c). For the Delawares in Ontario he gave the names of birds in both native language and colloquial English equivalent (along with official Latin and English names), and gave the Indian's interpretation of the calls and songs of those birds (1946d). In his final paper on this topic he described the Indian's interpretation of metamorphosis of geese into beavers, of snakes into raccoons, of deer into whales, etc. (Speck and Wittoft, 1947).

CONCLUSIONS

Frank G. Speck, naturalist-ethnographer, made numerous contributions to the ethnobiology of American Indians of eastern North America. He worked with many ethnic groups over many years reporting on their preservation and utilization of natural resources for clothing, decoration, utensils, foods, and medicines, and their methods employed in obtaining those resources. Also, he studied and reported on the role of animal life in their folklore.

He gave much attention to the family hunting territory system which he at first believed to be pre-Columbian in origin, but later was convinced that the system developed after contact with Europeans and their demand for furs. In spite of his initial conclusion, his studies explain the operation of the system in historic time for several different groups.

In some 48 publications, including three books, ethnobiology was a major if not exclusive focus, and it was incidentally included in many other works.

LITERATURE CITED

- | | |
|---|--|
| CASTETTER, EDWARD F. 1944. The domain of ethnobiology. <i>Amer. Nat.</i> 78:158-170. | Canada. Bull. 65, Anthropol. Ser. No. 15, Nat. Mus. Canada. Ottawa, Canada. |
| DEXTER, RALPH W. 1954. On field trips with Frank G. Speck, American ethnologist. <i>The Biologist</i> 36:13-17. | LEACOCK, ELEANOR B. 1954. The Montagnais "hunting territory" and the fur trade. <i>Amer. Anthropol.</i> 56(5, pt. 2):1-59. |
| HALLOWELL, A. IRVING. 1951. Frank Gouldsmith Speck, 1881-1950. <i>Amer. Anthropol.</i> 53:67-87. | MASON, J. A. 1950. Frank Gouldsmith Speck, 1881-1950. <i>Bull. Philadelphia Anthropol. Soc.</i> 3:3-4. |
| HICKERSON, HAROLD. 1967. Some implications of the theory of the particularity, or "atomism", of Northern Algonkians. <i>Current Anthropol.</i> 8:313-343. | MERRELL, JAMES H. 1983. Reading "An almost erased page": A reassessment of Frank G. Speck's Catawba studies. <i>Proceed. Amer. Philos. Soc.</i> 127:248-262. |
| JENNESS, DIAMOND. 1958. The Indians of | SPECK, FRANK G. 1910. Some uses of birch |

LITERATURE CITED (continued)

- bark by our Eastern Indians. *Mus. Jour., Univ. Pennsylvania* 1:33-36.
- _____. 1911a. Notes of the material culture of the Huron. *Amer. Anthropol.* 13: 208-228.
- _____. 1911b. Huron moose hair embroidery. *Amer. Anthropol.* 13:1-14.
- _____. 1913. The Indians and game preservation. *The Red Man* 6:21-25.
- _____. 1915a. The family hunting band as the basis of Algonkian local organization. *Amer. Anthropol.* 17:289-305.
- _____. 1915b. Family hunting territories and social life of various Algonkian bands of the Ottawa Valley. *Canada Dept. Mines, Geol. Survey Mem. No. 70 (Anthropol. Series No. 8)*.
- _____. 1916. Wampum in Indian tradition and currency. *Proceed. Numismatic and Antiquarian Soc. of Philadelphia* 27: 121-130.
- _____. 1917. Medicine practices of the Northeastern Algonquians. *Proceed. 19th Internat. Cong. Americanists*, pp. 303-321.
- _____. 1919. The functions of wampum among the Eastern Algonkian. *Mem. Amer. Anthropol. Assoc.* 6:3-71.
- _____. 1921. Bird lore of the Northern Indians. *Univ. Pennsylvania Faculty Public Lectures* 7:349-380.
- _____. 1922. Beothuk and Micmac. *Indian Notes and Monographs (Mus. Amer. Indian, Heye Founda.) Series 2, no. 22*.
- _____. 1932a. Mistassini hunting territories in the Labrador Peninsula. *Amer. Anthropol.* 25:452-471.
- _____. 1923b. Reptile lore of the Northern Indians. *J. Amer. Folk-lore* 36: 273-280.
- _____. 1923. Snake-folklore: the snake who swallows her young. *J. Amer. Folklore* 36:298-300.
- _____. 1925. Dogs of the Labrador Indians. *Nat. Hist.* 25:58-64.
- _____. 1926. Culture problems in Northeastern North America. *Proceed. Amer. Philos. Soc.* 65:272-311.
- _____. 1927a. Eskimo carved ivories from Northern Labrador. *Indian Notes (Mus. Amer. Indian, Heye Founda.)* 4:309-314.
- _____. 1927b. Family hunting territories of the Lake St. John Montagnais and neighboring bands. *Anthropos* 22:387-403.
- _____. 1927c. Huron hunting territories in Quebec. *Indian Notes (Mus. Amer. Indian, Heye Founda.)* 4:1-12.
- _____. 1928a. Mohegan beadwork on birch bark. *Indian Notes (Mus. Amer. Indian, Heye Founda.)* 5:295-298.
- _____. 1928b. Notes of the functional basis of decoration and the feather technique of the Oglala Sioux. *Indian Notes (Mus. Amer. Indian, Heye Founda.)* 5:1-42.
- _____. 1928c. Territorial subdivisions and boundaries of the Wampanoag, Massachusetts, and Nauset Indians. *Indian Notes and Monographs (Mus. Amer. Indian, Heye Founda.) No. 44*, 152 pp.
- _____. 1930. An ethnologist's impression of the bone implements from Safe Harbor. *Bull. Soc. Pennsylvania Arch.* 1: 4-6.
- _____. 1931. Birch-bark in the ancestry of pottery forms. *Anthropos* 26:407-411.
- _____. 1935. Naskapi—the savage hunters of the Labrador Peninsula. *Univ. Oklahoma Press, Norman*.
- _____. 1935-36. Eskimo and Indian backgrounds in Southern Labrador. *Gen. Mag. and Hist. Chronicle (Univ. Pennsylvania)* 38:1-17; 143-163.
- _____. 1936. Inland Eskimo bands of Labrador. Pp. 317-322. *in: Lowie, R.H. (ed.). Essays in anthropology presented to A. L. Kroeber. Univ. California Press, Berkeley*.
- _____. 1937a. Analysis of Eskimo and Indian skin-dressing methods in Labrador. *Ethnos* 2:345-353.
- _____. 1937b. Pp. 179-197. Catawba medicines and curative practices. *Philadelphia Anthropol. Soc. (25th Anniver. Vol.)*.
- _____. 1938a. Aboriginal conservators. *Bird-lore* 40:258-261.
- _____. 1938b. The cane blowgun in Catawba and Southeastern Ethnology. *Amer. Anthropol.* 40:198-204.
- _____. 1940a. Penobscot man, the life history of a forest tribe in Maine. *Univ. Pennsylvania Press, Philadelphia*.
- _____. 1940b. Eskimo jacket ornaments of ivory suggesting function of bone pendants found in Beothuk sites in Newfoundland. *Amer. Antiquity* 5:225-228.
- _____. 1941a. The gourd lamp among the Virginia Indians. *Amer. Anthropol.* 43: 676-678.
- _____. 1941b. Gourds of the South-

LITERATURE CITED (continued)

- eastern Indians. New England Gourd Soc., Boston.
- _____. 1941c. A list of plant curatives obtained from the Houma Indians of Louisiana. *Primitive Man* 14:49-73.
- _____. 1943. A social reconnaissance of the Creole Houma Indian trappers of the Louisiana Bayous. *Amer. Indigena* 3:134-146; 210-220.
- _____. 1944. Catawba herbals and curative practices. *J. Amer. Folk-lore* 57:37-50.
- _____. 1946a. Catawba hunting, trapping and fishing. Joint Publ., Mus. Univ. Pennsylvania and Philadelphia. *Anthrop. Soc. No. 2*.
- _____. 1946b. Cudgelling rabbits and old Nanticoke hunting tradition and its significance. *Bull. Arch. Soc. Delaware* 4:9-12.
- _____. 1946c. Ethnoherpetology of the Catawba and Cherokee Indians. *J. Washington Acad. Sci.* 36:355-360.
- _____. 1946d. Bird nomenclature and song interpretation of the Canadian Delaware: an essay in ethno-ornithology. *J. Washington Acad. Sci.* 36:249-258.
- _____. 1948-49. Addendum to gourds of the Southeastern Indians. *Gourd Seed* 9:15; 10:3-6, 8, 11-12, 16.
- _____. 1949. A maker of ell pots among the Nanticokes of Delaware. *Bull. Arch. Soc. Delaware* 4:25-27.
- SPECK, FRANK G. and RALPH W. DEXTER. 1946. Molluscan food items of the Houma Indians. *Nautilus* 60:34.
- _____. 1948. Utilization of marine life by the Wampanoag Indians of Massachusetts. *J. Washington Acad. Sci.* 38:257-265.
- _____. 1951. Utilization of animals and plants by the Micmac Indians of New Brunswick. *J. Washington Acad. Sci.* 41:250-259.
- _____. 1952. Utilization of animals and plants by the Malecite Indians of New Brunswick. *J. Washington Acad. Sci.* 42:1-7.
- SPECK, FRANK G. and ERNEST S. DODGE. 1945a. On the fable of Joe Pye, Indian herbalist, and Joe Pye weed. *Sci. Month.* 61:63-66.
- _____. 1945b. Amphibian and reptile lore of the Six Nations Cayuga. *J. Amer. Folk-lore* 58:306-309.
- SPECK, FRANK G. and LOREN C. EISELEY. 1939. Significance of hunting territory systems of the Algonkian in social theory. *Amer. Anthrop.* 41:269-280.
- _____. 1942. Montagnais-Naskapi bands and family hunting districts of the Central and Southeastern Labrador Peninsula. *Proceed. Amer. Philos. Soc.* 85:215-242.
- SPECK, FRANK G. and W.S. HADLOCK. 1946. A report on tribal boundaries and hunting areas of the Malecite Indian of New Brunswick. *Amer. Anthropol.* 48:355-374.
- SPECK, FRANK G., R.B. HASSRICK, and E.S. CARPENTER. 1942. Rappahannock herbals, folklore, and science of cures. *Proceed. Delaware Co. Insti. Sci.* 10:1-55.
- _____. 1946. Rappahannock taking devices: traps, hunting and fishing. Joint Publ. Mus. Univ. Pennsylvania and Philadelphia. *Anthrop. Soc. No. 1*.
- SPECK, FRANK G. and W.C. ORCHARD. 1925. The Penn wampum belts, Leaflets Mus. Amer. Indian (Heye Foundation). No. 4.
- SPECK, FRANK G. and C.E. SCHAEFFER. 1950. The deer and rabbit hunting drive in Virginia and the Southeast. *Southern Indian Studies* 2:4-20.
- SPECK, FRANK G. and JOHN WITTHOFT. 1947. Some notable life-histories in zoological folklore. *J. Amer. Folk-lore* 60:78-84.
- VECSEY, CHRISTOPHER and ROBERT W. VENABLES. 1980. American Indian environments, ecological issues in native American history. Syracuse Univ. Press, Syracuse, New York.
- WALLACE, ANTHONY F.C. 1949. In memoriam: Frank G. Speck. *Pennsylvania Arch.* 19:51-53.
- _____. 1951. The Frank G. Speck collection. *Proceed. Amer. Philos. Soc.* 95:286-289.
- _____. 1968. The value of the Speck papers for ethnohistory. Pp. 20-34 in: *The American Indian: A conference in the American Philosophical Society Library.* Amer. Philos. Soc. Lib. Publ. No. 2.
- WITTHOFT, JOHN. 1950. Frank Gouldsmith Speck, 1881-1950, Ethnologist and Teacher. *Southern Indian Studies* 2:38-44.

NOTE

1. Quoted by permission: Archives, University of Illinois Library.