current research

Coordinated by Teresita Majewski

Assistant Editors. Amazon, Eastern Brazil, and the Orinoco: Ronald L. Weber, Department of Anthropology, Field Museum of Natural History, Roosevelt Road at Lake Shore Drive, Chicago, IL 60605; Andean South America: Richard L. Burger, Department of Anthropology, Yale University, New Haven, CT 06520; California and the Great Basin: Eugene M. Hattori, 109 Lombardy Lane, Orinda, CA 94563; Caribbean: Samuel M. Wilson, Department of Anthropology, University of Texas, Austin, TX 78712; Central America: Frederick W. Lange, University of Colorado Museum, Campus Box 218, University of Colorado, Boulder, CO 80309; Far North: Raymond J. Le Blanc, Department of Anthropology, 13-15 Tory Bldg., University of Alberta, Edmonton, AB T6G 2H4, Canada; Great Lakes: Richard W. Yerkes, Department of Anthropology, 245 Lord Hall, 127 W. 17th Ave., Ohio State University, Columbus, OH 43210-1364; Mesoamerica: John S. Henderson, Department of Anthropology, McGraw Hall, Cornell University, Ithaca, NY 14853; Northeast: George P. Nicholas, Department of Social and Environmental Studies, Cariboo College, P.O. Box 3010, Kamloops, BC V2C 5N3, Canada; Northwest: Frank Leonhardy, Department of Sociology-Anthropology, University of Idaho, Moscow, ID 83843; Plains: Joseph Tiffany, Department of Social Sciences, Building 5, California State Polytechnic University, Pomona, CA 91768; Siberia: John F. Hoffecker, Energy and Environmental Systems Division, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, IL 60439; Southeast: Richard W. Jefferies, Department of Anthropology, University of Kentucky, Lexington, KY 40506; Southern Cone: Tom D. Dillehay, Department of Anthropology, 109 Davenport Hall, 607 So. Mathews, University of Illinois, Urbana, IL 61801; Greater Southwest: Robert D. Leonard, Department of Anthropology, University of New Mexico, Albuquerque, NM 87131.

Please note the following deadlines for submission of current-research information to the respective assistant editors. Contact the respective assistant editors for information on format and regarding late submissions.

- March 1: Greater Southwest, Mesoamerica, Central America.
- *June 1:* Caribbean, The Amazon, Eastern Brazil, and the Orinoco, Andean South America, Southern Cone.
- September 1: Siberia, Far North, Northwest, California and the Great Basin.
- December 1: Plains, Great Lakes, Northeast, Southeast.

THE CARIBBEAN

Elizabeth S. Wing, curator of zooarchaeology, and Lee Ann Newsom, doctoral candidate in paleoethnobotany at the University of Floria, are conducting research at the Florida Museum of Natural History on the plant and animal remains excavated from several West Indian sites. Their research concerns all aspects of resource exploitation, including (1) plants and animals used for food and for the manufacture of tools and other objects, (2) woods used for fuel, (3) introduced captive animals and wild cultivated plants, and (4) introduced domesticates. Thus far, materials have been identified from sites in Barbados (excavated by Peter Drewett) and from the site of En Bas Saline, Haiti (excavated by Kathleen Deagan). Work has begun on sites in Antigua (excavated by Bruce Nodine), in St. Martin (excavated by Jay Haviser), and in Nevis (excavated by Samuel Wilson). Sites still to be studied are from Saba (excavated by Menno Hoogland), the Virgin Islands (excavated by Ken Wild and Mr. and Mrs. Philip Caesar), and the Bahamas (excavated by William Keegan).

In January 1990, the Bullen Research Library of the Florida Museum of Natural History (FMNH), Gainesville, published the first volume of a *Bibliography of Caribbean Archaeology*, which is over 100 pages long with more than 1,500 references and is available on 3.5-inch diskettes free of charge to anyone who includes a self-addressed stamped envelope with their request.

From 1987 to 1990 Osvaldo García-Goyco (Universidad Compultense de Madrid) conducted doctoral research on the lexicon and morphology of the Arawak linguistic family of South America and the West Indies. Using the "Swadesh" 100-word noncultural list, he has obtained a high percentage of possible cognates (defined as words with common affixes and the same meanings) between the Guajiro Arawak of Venezuela's Coast and some Mayan languages.

The preliminary percentages of possible cognates between Guajiro Arawak and the following languages are: Maya (Yucatec, Itzá, Mopán) 44–52 percent, Tzotzil 34 percent, Chuj 33 percent, Tzeltal 30 percent, Chorti 30 percent, Tojolabal 28 percent, Mopán 28 percent, Quiché 23 percent, Cakchiquel 22 percent. Comparing Guajiro with 25 Mayan languages, the percentage of possible cognates rose to 85 percent. These percentages are very high taking into account that the affinity of the Guajiro with the Warrau of Venezuela and the Karina of Surinam was only 12 and 11 percent, respectively, despite the geographical proximity.

García-Goyco has found about 650 possible cognates between Guajiro and Maya, including 295 verbs, 213 nouns (37 body parts, 18 kinship terms), and 123 adjectives. The Mayan words collected after 1797 were identified because of the presence of an Arawakanspeaking colony moved from San Vicente Island to Honduras Bay in that year, but the results did not change significantly.

In 1988 and 1989 Sebastián Robiou-Lamarche carried out comparative analyses of the mythologies of the Quiché Maya (based on the Popul Vuh), the Taínos (based on the treatise of Fray Ramón Pané), and the Island Caribs (based on Breton's Dictionaire Caraibe-Français). He encountered symbolic parallels between several deities-the Hurakán of Mesoamerica, the Anacacuya of the Greater Antilles, and the Iáboura of the Lesser Antilles. From his analyses Robiou-Lamarche feels that these deities are related to the hurricane, to the center of the universe or axis-mundi, to a hero with one leg or foot, to a mythical canoe voyage, to the North Star and to the constellation of the Great Bear (or Big Dipper). The researcher postulates that the place where the Great Bear constellation rises, relative to the North Star, could serve as a calendric device for both the Antilles and Yucatán. The disappearance of the constellation below the horizon in April would signify the beginning of the rainy season, while its reappearance above the horizon in August would mark the beginning of the hurricane season in both regions.

BAHAMAS. In December 1989, William Keegan and Maurice Williams (FMNH) conducted an archaeological survey of Grand Turk, Turks, and Caicos islands. The survey was done at the request of the Bahamian government, in an attempt to strengthen its claim as the island of Columbus's first landfall. A small Lucayan village site of approximately 80 x 30 m was found, but excavations were not conducted. Future investigations will examine the structure of the site and will seek to establish the dates during which the site was occupied.

GREATER ANTILLES. Jamaica. E. Kofi Agorsah (University of the West Indies, Mona, Jamaica [UWI]) and Candice Goucher (Portland State University) have been excavating at Morant Bay, St. Thomas Parish, an important metal-working industrial site. The research is part of Goucher's ongoing African-Caribbean Technology Project, which aims at the identification and study of African technological continuities in the Caribbean. Their excavations are intended to collect archaeological data to complement documentary data for reconstructing the history of an iron and brass foundry established by the Englishman John Reeder in the late 1770s. Research so far indicates that the range of interactions between African and European technologies included industrial settings in which African metallurgists, referred to in documentary sources, contributed considerable skill and expertise. The foundry site demonstrates with its excavated furnace and cast iron and brass artifacts, that technology transfer was an inevitable consequence of the African Slave trade.

E. Kofi Agorsah also is investigating the settlement patterns of historical sites in Jamaica, with special emphasis on Maroon settlements. The research uses archaeological, ethnographic, and historical evidence to identify sociocultural elements of African traditions that have been lost by societies of African descent. Data are being analyzed in the context of the social and physical environments to which such societies had to adapt.

Several sites have been identified in and around the Blue and John Crow mountains, particularly around Moore Town, Nanny Town, and in areas around the Snake, Río Grande, and Dry rivers, all in the eastern part of Jamaica. Investigations also are ongoing in the Cockpit country in the west, near the present town of Accompong in St. Elizabeth Parish, around the burial grounds of Cudjoe, the popularly known Maroon leader. Remains of house foundations, local and imported ceramics, smoking pipes, wine bottles, and metal artifacts have been recovered. Further reconnaissance and excavations will be carried out.

Douglas V. Armstrong (Syracuse University [SU]) and Kenneth Kelly (University of California, Los Angeles) carried out archaeological and historical research at Seville Plantation from May to July 1989. The project is cosponsored by the Jamaica National Heritage Trust. The 1989 season focused on an area of the estate's slave village that was occupied ca. 1670-1760. An entire house foundation and yard area (HA16) was excavated. The house dates to the founding of the plantation and has a mean ceramic date of 1730. Postholes and post molds indicate wattle-and-daub construction with an interior partition dividing the house into two rooms. Artifact deposition patterns indicate an outside cooking area attached to the back of the house. Cleared areas in the yard suggest social activities outside the house but within a house and yard compound. An eastfacing burial of a male of African descent was recovered beneath the house and burial is under analysis by Mark Fleischman (SU). Material remains from HA16 include refined earthenware from England as well as a variety of locally made coarse earthenware *vabba* bowl and pot forms. Several ground cairo-shell beads were recovered; these items probably were brought from Africa by the slaves. Research at Seville Plantation continues with the goal of relating changes in houseyard compound layout to internal developments with the emergence of an Afro-Jamaican community.

Haiti and the Dominican Republic. Juan José Ortiz Aguilú (Temple University [TU]) and Froelich G. Rainey (The University Museum, University of Pennsylvania) conducted excavations in 1982-1984 at Bois Neuf, near the central-western coast of Haiti, under the sponsorship of the Huguette F. Mevs Foundation of Port-au-Prince. The prehistoric site is on the west bank of Ravine Seche, 200 m from the sea. Both intensive surface collection and detailed topographic mapping were conducted on a 5-m grid covering approximately 200 x 500 m. The topographic map revealed two flat rectangular areas, low relief mounds, and smaller flat areas. When viewed in conjunction with density plots of ceramics and cryptocristalline stone artifacts, an approximation of the subsurface structure of the site was apparent. The top component of the Bois Neuf site was dated to the fifteenth century A.D. Uncorrected radiocarbon dates from the site's most recent component are A.D. 1500 ± 80 (Beta-6306) and A.D. 1430 ± 50 (Beta-7146, based on charcoal). A ceramic sherd of Bois Neuf curvilinear (BNC), a Carrier-like style, provided a thermoluminescence (TL) date of A.D. 1375 \pm 115 (Alpha-802). A sherd from Bois Neuf rectilinear (BNR), a Melliac-related style, also was TL dated to A.D. 1450 \pm 100. Both BNC ceramics and BNR ceramics were present in the same late-dating excavated contexts. Lithic material at the site was profuse, containing large quantities of short blades and backed, single-edged knives.

Beneath the relatively short-lived late prehistoric or protohistoric stratum (A.1) of Bois Neuf were three distinct aceramic components. The uppermost, A.2, provided radiocarbon dates of A.D. 1310 ± 60 (Beta-9199) and A.D. 1390 ± 60 (Beta-9200). Artifacts included a few small blades and chipped-stone tools, Strombus sp. containers and Cittarium sp. remains. The artifacts in lower component B are similar to those in A.2, but the component dates to the early first millennium A.D. Radiocarbon dates are A.D. 500 ± 290 (Beta-7144); A.D. 400 \pm 50 (Beta-7147); A.D. 235 \pm 115 (Beta-7148); and A.D. 230 \pm 100 (Beta-7145). Component C is buried under nearly 3 m of undisturbed clayish silt. A Strombus celt, a small flint blade, and two small hearths were recovered in limited testing. Charcoal from the hearths was radiocarbon dated to 790 ± 65 B.C. (Beta-7142) and 905 ± 55 B.C. (Beta-7141).

Kathleen Deagan (FMNH) is completing analysis and synthesis for a final report for the site of En Bas Saline, in northern Haiti. Excavations at the site were carried out by the FMNH from 1983 to 1988. The site is a Carrier-period oval-shape village measuring approximately 250 x 350 m. Work has included preparation of a topographic map of the entire site, a 100 percent surface collection, a 100 percent electromagnetic survey of the site, and the excavation of 45 3-x-1.5-m units. At the site, research has focused on what is thought to be the contact period town of the Taíno chief Guacaranic (it was in Guacaranic's town that Columbus built the fortress of La Navidad in 1492). Radiocarbon and TL dates indicate that the site dates to between A.D. 1250 and 1500. Faunal analysis is underway by Elizabeth Wing, floral analysis by Lee Newsom, analysis of survey and reconnaissance materials by Maurice Williams, and excavation interpretations by Kathleen Deagan (all FMNH).

In 1988, Kathleen Deagan and José Cruxent completed a survey of the site of La Isabela, Dominican Republic. The work was done in conjunction with the Dominican National Park Service and the FMNH. The work was intended to delineate the settlement of La Isabela and included topographic mapping and a complete systematic subsurface test program on a 10-m grid over the site. The site covers approximately 4 ha and reflects the very sparse Spanish occupation that took place there from 1493 to 1498. Excavations will be continued in the summer of 1990.

In April 1990, Joaquín Nadal, Fernando Morbán Laucer, Alejandro Peguero G., and members of the Department of Archaeology of the Museo del Hombre Dominicano (MHD) conducted test excavations at the site of Manoguayabo, 14 km west of Santo Domingo, Dominican Republic. The site is located 800 m north of the Río de Manoguayabo. The site contained Chicoid ceramics and large quantities of burin fragments from cassava griddles. Faunal remains were not present. Palynological analyses indicate the presence of *yuca* (Manihot sp.), guayaba or guava (Psidium guajava) and hobos or mombin (Spondias sp.). None of these species are growing in the region today.

Fernando Morbán Laucer, Plinio Pina P., and Luis A. Peguero (MHD) conducted excavations from 1986 to 1988 at the site of Los Corrales (Talanquera), on the southeast coastal plains of the Dominican Republic. The site is in the Guavacanes area in the province of San Pedro de Macorís. The site contained burin fragments from cassava griddles and abundant faunal remains. Analyses indicate that people at the site fished and caught small game, but the abundance of net weights and the faunal sample itself suggest that fishing was more important. The presence of mushroom spores and freshwater algae and palynological research suggest that climatic and ecological change has taken place since the site was occupied. Ceramics appear to be similar to styles as early as Hacienda Grande from Puerto Rico.

Puerto Rico. Juan José Ortiz Aguilú (TU) has conducted investigations at the site of Cucharal-Tecla, in Guayanilla, less than 1 km from the south-southwest coast of Puerto Rico. The site consisted of a surface scatter of more than 10 ha, most of which had been plowed for sugar-cane cultivation for 200 years. Intensive surface collection and density mapping have been used to suggest that the long-term impact of plowing had not destroyed the horizontal structure of the site. The density maps showed nonrandom patterning of shell and ceramics, with ceramics predominating in the center of the site, and shell debris being most prevalent on the periphery.

J. J. Ortiz Aguilú also conducted investigations at the site of Las Flores, Coamo, in south-central Puerto Rico, 6-7 km from the sea. Detailed topographic mapping was used to reveal what the investigators termed the *cultural topography* of the site-the topographical remains of prehistoric house middens, plazas and public areas, paths, and other features preserved in the microtopography of the site. By recording elevations on a 2-m grid and using computer-assisted extrapolations, detailed topographic maps were produced that revealed the existence of a plaza or ball-court area of 1,000 square meters, 6 middens, and several areas that are interpreted as house locations. These interpretations have been verified with subsurface testing. The site has multiple components from early Puerto Rican Saladoid (Hacienda Grande) to late Puerto Rican Ostionoid, with the most concentrated occupation occurring from A.D. 700 to 1300. Radiocarbon samples taken from material removed during the construction of a plaza suggest a date for the construction of the plaza not later than A.D. 650. A sample dating to A.D. 570 \pm 45 (P-2607, based on charcoal) was recovered two levels above the plaza construction backfill, and a sample from a context deposited in another location after plaza construction was dated to A.D. 770 \pm 45 (P-2596). Both samples were associated with a transitional ceramic assemblage interpreted as falling between Puerto Rican late Saladoid and early Ostionoid.

Radiocarbon dates from the larger Ostionoid occupation at Las Flores are A.D. 950 ± 45 (P-2598); A.D.

890 ± 45 (P-2729); A.D. 960 ± 50 (P-2595); and A.D. 1350 ± 45 (P-2599). Several burials were encountered in these later deposits. A 3-4-year-old child was buried in a stone-lined pit in the northwest corner of the plaza. Another burial of a 3-4-year-old child, found on the southwest periphery of the plaza, provided evidence that the feet had been removed postinterment, and a triangular arrangement of stones was found next to the face. The location and configuration of these burials may suggest some status ascription in mid-to-late Ostionoid times. Ceramic analyses still are incomplete, but small numbers of modeled-incised adornos suggest a late Ostiones or Santa Elena association. Ceramics with 1-cm rounded indentations on the outer surface. which excavators termed cerámica hoyuelada or pockmarked ware, were common in the later component of the site.

Miguel Rodríguez and Virginia Rivera have conducted excavations at the site of Punta Candelero, in southeast Puerto Rico, since 1987. The research has revealed two periods of occupation, a La Hueca or early Saladoid component and a later Cuevas component. The investigations have been directed toward reconstructing the paleoenvironments at Punta Candelero and the patterns of resource utilization through time. Preliminary faunal analyses suggest that during both occupation phases, coastal species were used heavily. During the La Hueca occupation the rocky coasts were exploited heavily, and during Cuevas times, greater attention was paid to areas of Thalasia sea grass. Coral reefs, sandy beach, mangroves, freshwater environments, and interior terrestrial environments also were exploited. Reconstructions of the hydrography of the region suggests motivations for seasonal shifts in resource exploitation.

Edgar J. Maiz, of the Centro de Investigaciones Folklóricas de Ponce and the Centro de Estudios Avanzados de Puerto Rico y el Caribe has conducted excavations at the site of Hernández Colón in south-central Puerto Rico. The site lies at 77 m asl, approximately 13.5 km from the sea, on the east bank of the Cerrillos River. Radiocarbon analyses date the site to ca. A.D. 400-700. Fine-mesh screening procedures have provided abundant zooarchaeological remains associated with Hacienda Grande, Cuevas, and Ostiones ceramics. S. Olson of the U.S. National Museum of Natural History, D. A. Hensley and C. Cutress of the Department of Marine Sciences of the University of Puerto Rico at Mayaguez, G. K. Pregill of the San Diego Natural History Museum, and Renato O. Rímoli of the MHD are involved as specialists on the project.

The analyses of remains from Hernández Colón indicate that a greater diversity of species was exploited during the Saladoid occupation of the site than in the succeeding Ostionoid occupation. There is a remarkable lack of terrestrial fauna such as rodents and terrestrial reptiles throughout the sequence. Also, the relative abundance of manioc griddles (*burenes*) is greater in Ostionoid strata than in Saladoid strata. Preliminary ceramic analyses suggest that the change from a Cuevas-associated style to an Ostiones-associated style may have occurred within a relatively short time span (50– 100 years). Radiometric dating of samples associated with ceramics suggests that Hacienda Grande ceramics were in use until ca. A.D. 450.

Since 1987, Angel Rodríguez Alvarez and his colleagues have been conducting a petroglyph survey on the island of Puerto Rico. The goal of the research is to gather information concerning the different artistic motifs, types of rock, and engraving techniques used by Amerindians. So far, the survey has centered on the northeastern Puerto Rican coast and its surrounding highlands. Nine different artistic patterns and five styles of rock engravings have been identified to date. Among the motifs are abstract geometric designs, long zig-zag lines (Coronarize-Capá styles), representation of faces (simple, developed, and complicated), sun symbols, swaddle figures, squatting female figures, Yocahu male figures, zoomorphic, head-on-rectilinear-body feet, and hand-holding anthropomorphic. Several engraving techniques were found such as plain lines, grinding, pecking, modeling, and leveling.

Measurements were taken of the size of the figure as a whole unit, and of the width and depth of the grooves. In addition, the compass orientation of the figure was recorded. Future research in other areas of the island will be aimed at locating new artistic styles, and at identifying patterns and techniques of pictographic representation.

Investigations were carried out at the site of Las Planás, in the municipality of Cayey in the mountains of southeast Puerto Rico. J. J. Ortiz Aguilú and Hector González Moret organized a preliminary survey in 1986 with the help of the Centro Cultural de Cayey and the Cayey University College of the University of Puerto Rico. Andrés Principe, José Rivera Meléndez, Carmelo Rivero, Michelle Lavergne, and Marisol Meléndez participated in the investigations, with Jerome Arledge of the Soil Conservation Service for the Caribbean acting as a technical consultant on agricultural terracing.

Las Planás is an extensive Ostionoid village site with a plaza or ball court at about 440 m asl, and over 300 stone-faced terraces on the slopes to a level of about 530 m asl. The dry-stone terrace walls range from .5 to 3 m in height and extend from 10 to 40 m in length. Test excavations were carried out, and these reveal that both the site and the terraces contain ceramics from middle to late Ostionoid in the local chronology. Although more testing is needed, the possible existence of terraces at Las Planás dating from the late first millennium A.D. suggests that the intensification of horticultural production in the Caribbean may have begun in some areas many centuries earlier than is commonly held.

LESSER ANTILLES. In connection with a survey of northeastern South American petroglyphs, C. N. Dubelaar conducted investigations made of Lesser Antilles rock engravings in June–July 1989. A manuscript entitled "Petroglyphs of the Lesser Antilles" based on this and earlier research is ready for publication. Preliminary results indicate the following: (1) with the exception of the intricate anthropomorphic engravings on ball-court slabs in Puerto Rico and some other Greater Antilles islands, there exists no marked difference in shape, technique, localization, etc., between Lesser and Greater Antilles petroglyphs; (2) a marked difference exists between Antillean and northeastern South American petroglyphs; (3) rock paintings occur in northeastern South America and in the Greater Antilles, but they are absent in the Lesser Antilles and Virgin Islands; (4) simple or elaborate faces comprise two-thirds of Lesser Antilles petroglyphs; and (5) Lesser Antilles petroglyphs do not show a preference for a special orientation (compass bearing).

Virgin and Leeward Islands. David R. Watters (Carnegie Museum of Natural History) and Jack Donahue (University of Pittsburgh [UP]) conducted pointcount analysis of thin sections from 44 sherds (Saladoid and Post-Saladoid) from eight prehistoric sites on four Lesser Antilles islands (Montserrat, Barbuda, Anguilla, and St. Martin). The study confirmed that all sherds from the totally limestone islands of Barbuda and Anguilla contain volcanic inclusions, which suggests that either temper or pottery was imported from volcanic islands in the vicinity.

James B. Peterson (University of Maine, Farmington) and David R. Watters identified 29 different ceramic vessels, 27 of which are undecorated, from three test pits in Fountain Cavern, Anguilla, using Peterson's vessel-lot analysis technique, a method developed for northeastern United States pottery that is now being applied to Caribbean ceramics.

During the period April-June, 1987, and November-December, 1989, J. M. Baart and a team of archaeologists from the Archaeological Department of the City of Amsterdam, in association with the Archaeological Anthropological Institute of the Netherlands Antilles, carried out excavations and surveys at the sites of Fort Amsterdam. Frontstreet 120 (Philipsburg), and the Bishop Hill plantation (Belle Pleine) on the isle of St. Martin. The excavations of Fort Amsterdam were carried out to uncover the remaining wall constructions, to document them, record their condition, to collect information concerning the material culture of the native Indian, European (Dutch, Spanish, French, and British), and African occupants from 1631 to the present. The Frontstreet 120 site excavation was carried out to expand our understanding of the history of the eighteenth-century civil settlement of Philipsburg and to locate the remains of Precolumbian and Postcolumbian Indian culture. A survey at Bishop Hill provided remains of eighteenth-century European and African material culture. In contrast with the known sources, preliminary results indicate that there were Indians living on St. Martin at the time the island was discovered by the Spaniards in the late sixteenth century. Further, the process of acculturation and the start of modern Afro-Caribbean culture can be traced by means of the study of the excavated material culture.

A binational French/Dutch archaeological excavation was conducted in October and November 1988, at the Hope Estate site (SM-026), St. Martin. This project was codirected by Jay B. Haviser from the Archaeological Anthropological Institute of the Netherlands Antilles and Henri Petitjean-Roget from the Direction des Fouilles et des Antiquities, Guadeloupe, with field assistance from the Centre d'Etudes Régional des Antilles (CERA). Test excavations were conducted to determine general subsurface stratigraphy at the site and acquire radiocarbon samples. Stratigraphic evidence indicated both vertical and horizontal separation of a distinctive artifact assemblage prior to and during the early Saladoid occupation at the site. This assemblage is characterized by ceramics with a lack of painted decoration and a focus on incised lines and modeledincised lugs on very thin, vitreous sherds; numerous eared axes were noted among the lithic tools. The radiocarbon dates, based on charcoal, associated with this component of the site, range from 560 ± 40 B.C. (PITT-0450) to 300 ± 40 B.C. (PITT-0220).

From February to May 1990, Menno Hoogland and Corinne Hofman (University of Leiden [UL], Netherlands) carried out excavations at the sites of Spring Bay and Kelbey's Ridge on the island of Saba. At Spring Bay excavations were carried at two of the three sites located in 1987 (Spring Bay 1 and 3). At Spring Bay 1 excavations were conducted to determine the geological setting of the site. A *ghut* (gully, arroyo) system had been filled up with midden material over a long period. Radiocarbon dates from the lower levels are A.D. 885 ± 30 (GrN-16771, based on shell) and A.D. 745 ± 30 (GrN-16772, based on charcoal). Pottery analyses suggests continual use of the dump area until the thirteenth century.

The Spring Bay 3 site on Saba is a small midden. Both pottery analysis and radiocarbon dates confirm habitation until the end of the thirteenth century. Radiocarbon dates of A.D. 1295 ± 30 (GrN-16773, shell) and A.D. 1305 ± 30 (GrN-16774) were obtained.

Excavations were carried out at the Kelbey's Ridge site, a habitation area dating to the fourteenth century. Excavations revealed postholes of a concentric or oval structure, a burial of an adult woman together with the cremation of a child, and pottery of the Chican Ostionoid subseries. Radiocarbon dates of A.D. 1355 \pm 30 (GrN-16032, charcoal); A.D. 1340 \pm 30 (GrN-16775, charcoal); A.D. 1320 \pm 30 (GrN-16777, charcoal); and A.D. 1325 \pm 35 (GrN-16776, shell) were obtained. Preliminary results suggest a small-scale, continuous occupation on Saba in the fourteenth century under the direct influence of the Virgin Islands (Spring Bay 3) and the Greater Antilles (Kelbey's Ridge 2).

A. H. Versteeg and a team from UL carried out excavations at the Saladoid Golden Rock site on St. Eustatius. The research is designed to provide complete documentation for a Saladoid period settlement. A midden and 6 round houses were excavated from 1984 to 1990. Some of the houses are large *malocas* – communal houses for 15–40 people. Many calibrated radiocarbon dates demonstrate occupation from ca. A.D. 550 to 750. Zone-incised-crosshatched and red-onwhite pottery is associated with all levels of the midden.

The Leiden team, under the direction of A. H. Versteeg also carried out test excavations at the post-Saladoid Godet and Smoke Alley sites on the leeward coast of St. Eustatius in 1988 and 1989. A large oval structure was excavated near the midden at Smoke Alley. Both sites are dated to ca. A.D. 1100–1200. The Godet and Smoke Alley sites are the only known prehistoric archaeological sites on St. Eustatius that postdate the Golden Rock site.

Another Leiden team, also under the direction of A. H. Versteeg, carried out excavations at two preceramic sites on St. Eustatius—Corre Corre 1 and 2. The sites are located near the windward coast. Both sites are dated to ca. 500 B.C.

The Nevis Conservation and Historical Society con-