

# COVICRIER

COLLEGE OF THE VIRGIN ISLANDS, CARIBBEAN RESEARCH INSTITUTE, ST. THOMAS, V.I. 00801

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### Research: Projects & Plans

WATER QUALITY REPORTS NOW AVAILABLE Two related reports on the quality of water from two different sources in the Virgin Islands are now available to the public.

Both reports were prepared by Harvey Winters and Irwin Isquith of Fairleigh Dickinson University under contracts with the Caribbean Research Institute.

The first of these reports is Microbial Analysis of Domestic Cistern Water in the U.S. Virgin Islands. The objective of this study was to determine whether cistern water supplies in the Virgin Islands, which are not covered by the Safe Drinking Water Act, pose a potential health hazard to their users. Cistern water supplies were studied to assess the types of heterotrophic bacteria, algae and protozoa that may be present. The bacterial study was directed towards identifying those organisms capable of causing disease in water supplies. Results showed

the presence of coliform bacteria, fecal streptococcus and <u>Salmonella</u> in most cisterns sampled.

The second report, Microbial Quality of Water in Old Wells and the Public Distribution System in the U.S. Virgin Islands, had as its objective to determine whether there exists a potential health hazard to users of the Virgin islands public water supply system and the old dug wells. These old wells were dug in the early 1900's and could serve as an alternate water source in water-short areas. The public water distribution system and the old wells did not generally meet the microbiological standards set forth in the Safe Drinking Water Act. The report concludes that a potential health hazard is believed to be associated with the public water distribution system in St. Croix and St. Thomas.

Copies of both of these reports are available from the Research Institute.

CISTERN During the months of WATER April and May bacte-riological examinations of drinking

water supply for St. Thomas house-holds were carried out. Over 100 cistern water samples were collected and of these 62% revealed a "not acceptable for human consumption" of which 26% were close to sewage effluent levels.

The tests were carried out by Mrs. Annelise Knudsen with the help of Lorden Warrington, a student aide.

They were met with enthusiasm at all the homes they visited and several persons expressed the wish that this be done more often.

A complete report of this study will be issued in October

The Director and the INSTITUTE MEETS ON Coordinator of the Environmental Research WATER Center met with Mr. PROGRAM Ouinones, Ferdinand Chief of the United States Geological Service, Caribbean Region and Dr. Munoz, Director of the Water Resources Research Institute of the University of Puerto Rico, in San Juan for discussion of the Institute water research program for the fiscal year. The meeting established a number of cooperative projects among the three agencies.

CONFERENCE order for Dr. S. B.

Jones-Hendrickson, Coordinator of the Social Research
Center (SRC) at the Institute, who
was officially installed as
President of Caribbean Studies
Association. Dr. Frank Mills,
Faculty Fellow at the Institute,
was appointed Program Chairman for
next year's conference.

Held in Santo Domingo,

Dominican Republic on May 25-28th, this year's conference theme was "Caribbean Studies: International Dimensions." Topics focussed on mass communication, health, religion, labor migration, economic development, and folklore specifically as they impact on Caribbean peoples. There were 11 panels chaired by Caribbeanists from the U.S.A., St. Thomas, V.I., Canada, Venezuela, France, The Netherlands and Trinidad.

Miss Rose Milligan, Research Specialist with SRC, also represented CRI at the conference and presented a paper entitled "The Political Economy of Caribbean Migration: The Case of St. Croix, V. I." The paper addressed the migratory process of the people from St. Croix to the United States, Santo Domingo, Panama, etc. in the early 1900's. It points out that the movement of Crucians in this early period could not be attributed to the process of rational decision on the part of the making emigrants but requires a complete understanding of the historical experiences of the Crucian social The paper also brings formation. out the internal contradictions which compelled the people's emigration to other parts of the Caribbean and the U.S.A. Milligan asserts that population pressure did not force Crucians to emigrate but rather the insertion of St. Croix into the world island's and the economy consequent underdevelopment.

PLOOD OF Dr. Owolabi Ajayi,
APRIL 18th, Research Associate Water Resources, has been surveying flood

damage and submitted the following report.

During the night of Sunday, April 17 and throughout most of the day of Monday, April 18, the islands of St. Thomas and St. John were inundated by a rainstorm which dumped over fifteen inches of rainfall in less than twenty four hours in most places. This storm was unusual in that there was no advance forecast of the developing of a storm of this magnitude from the National Weather Services office in San Juan, Puerto Rico. Consequently, island residents on St. Thomas and St. John were unprepared for its impact and devastation.

The measured rainfall at the College weather station during the period of the storm was 15.80 inches. The following figure shows the amount of rainfall recorded throughout the island of St. Thomas.

Preliminary analysis of the rainfall and runoff frequency data available indicated that their probability of occurrence is of the order of 100 years. This means that the rainstorm which occurred during April 17-18, 1983 is expected to be equalled or exceeded once every 100 years on the average.

There is a gap in our present scientific knowledge of the characteristics of natural events, such as the distribution, magnitude and frequency of rainfall and flooding due to the inadequacies of the present observation network. A lot more can be learned about these characteristics if the density of weather observation stations is increased.

#### **Outreach Activities**

COORDINATOR
TO SERVE ON
LOCAL
ORGANIZATION
Job Training Coordinating Council
(STJCC). The STJCC is one of two

councils established by Public Law 97-300 (October 13, 1982), The Job Training Partnership Act. The purpose of the Act is to "Establish programs to prepare youth and unskilled adults for entry into the labor force and to afford job training to those economically disadvantaged individuals and other individuals facing serious barriers to employment..."

During the month of May, Jones-Hendrickson was elected chairman of the Fiscal Affairs and Oversight Committee of the STJCC.

Jones-Hendrickson was elected to a two-year term as chairman of The Caribbean Peoples Congress, Inc., St. Croix on April 17th. The organization has as its aims (1) to be a vehicle for social change in the Virgin Islands, (2) to ensure that the rights of Caribbean people are preserved and protected within the confines of the law, and (3) to be a mechanism for diffusion of those facts, events and developments that are of importance to Caribbean people.

#### **Publications**

The article, "Tourism Investment and Ownership: Local Versus Foreign," by S.B. Jones-Hendrickson has been published in Bulletin of Eastern Caribbean Affairs, Vol. 8, No. 5.

Also published is Jones-Hendrickson's article on workers which has been translated into German under the title: "US Jungfern-Inseln" in Internationales Gewertschafte Handbuch, (International Workman's Handbook) and includes articles on labor practices all over the world. It is published by Leske Budrick, Opladen, with Siegfried Mielke as Herausgeber (editor).

## Publications Available at CRI

- Bliss, Leonard B. Virgin Islands
  of the United States Public
  School Basic Skills Achievement Survey TECHNICAL REPORT
  #2 ITEM ANALYSIS AND REPORT
  OF STUDENT SKILLS OF
  SECONDARY SCHOOL STUDENTS.
  1982. \$3.00.
- Bullock, Peebles, and Smith.

  Water Usage in the U.S.

  Virgin Islands. 1980. \$2.50.
- Isquith, Irwin R. and Winters,
  Harvey. Microbial Analysis
  of Domestic Cistern Water in
  the U.S. Virgin Islands.
  1981. \$3.00.
- Isquith, Irwin R. and Winters,
  Harvey. Microbial Quality
  Water in Old Wells and the
  Public Distribution System in
  the U.S. Virgin Islands.
  1981. \$3.00.
- Peebles, Prat and Smith.

  WATERPLAN: A Comprehensive
  Water Management Framework
  for the U.S. Virgin Islands.
  1979. \$2.00.

BOOKS

- McElroy, Jerome L. and Caines,
  Joseph. Consumer Expenditure
  Patterns--A Survey of St.
  Thomas U.S.V.I., 1975-1976.
  University of Florida Press.
  \$11.00.
- Varlack, Pearl and Harrigan,
  Norwell. The Virgins: A
  Descriptive and Historical
  Profile 1977. Caribbean
  Research Institute. 1977.
  \$3.95.
- Microstate Studies. Volume 1.
  University of Florida Press.
  \$4.00.
- Microstate Studies. Volume 2.
  University of Florida Press.
  \$4.50.
- Microstate Studies. Volume 3.
  Caribbean Research Institute.
  \$4.50.

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The Caribbean Research Institute is a division of the College of the Virgin Islands. It was established in 1966 to provide a central research agency in the Virgin Islands and to encourage research in the Caribbean basin. It pursues a broad spectrum of investigation in the natural, physical, social and economic sciences.