

**CARICOM FISHERY RESEARCH DOCUMENT No. 27**



**SECOND WORKSHOP OF REGIONAL EXPERTS  
TO DEVELOP THE CARIBBEAN FISHERIES  
MANAGEMENT DATABASE  
SOFTWARE PROGRAMS**

**Workshop Report**  
*(November 6<sup>th</sup> – 10<sup>th</sup>, 2001, Kingston, Jamaica)*

CARICOM Fisheries Unit  
Belize City, Belize C.A.

**December 2001**

**SECOND WORKSHOP OF REGIONAL EXPERTS TO DEVELOP THE  
CARIBBEAN FISHERIES MANAGEMENT DATABASE  
SOFTWARE PROGRAMS**

**Preparation of this Report**

**This report was compiled by the CARICOM Fisheries Unit (CFU) staff based on the written and verbal contributions of the Chairman and members of the TIP/LRS Working Group. These include: Michael Braynen, The Bahamas (Chairman); Stephen Willoughby (Barbados); Sharon Corriette (Dominica); Shellene Reynolds (Jamaica); Patricia Hubert (St. Lucia); Cheryl Jardine (St Vincent and the Grenadines); Mario Yspol (Suriname); Calvin Alexander (Trinidad & Tobago); Sherrill Barnwell (OECS- NRMU); Milton Haughton; Merline Hemmings; Terrence Phillips (CARICOM Fisheries Unit) and Paul Medley (Consultant-CFU).**

---

*Jointly funded by the European Union, CIDA and the CARICOM Member States.*

CARICOM Fisheries Unit  
Belize City, Belize  
December 2001 **TABLE OF CONTENTS**

|   | <b>Page</b> |
|---|-------------|
| <b>Executive Summary</b>  | <b>ii</b>   |
| <b>Section I</b>  |             |
| Summary of Workshop activities  | <b>1</b>    |
| <b>Appendices</b>   |             |
| Appendix I: Installation Procedure                                    | <b>23</b>   |
| Appendix II: Caribbean Fisheries Information system<br>(CARFIS) Forms | <b>25</b>   |
| Appendix III: Agenda, List of Participants                            | <b>60</b>   |

## Executive Summary

The main objective of the Fisheries Component of the Integrated Caribbean Regional Agriculture and Fisheries Development (ICRAFD) Programme is optimal utilization and sustainable management of marine resources in the CARIFORUM countries. The participating countries include Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Lucia, St. Kitts and Nevis, St. Vincent and the Grenadines, Suriname and Trinidad and Tobago.

The purpose of the Fisheries Data Management Systems component of the project is to improve the Data Collection and Management Systems in the CARIFORUM Countries; to provide fisheries data for assessment and management, as well as an effective tool for monitoring and regulating fishing effort.

In an effort to provide information for management and decision-making on a continuous basis, the Project will assist the Fisheries Departments/Divisions to strengthen their data collection and management systems. The Upgrade of Trip Interview Program (TIP) and the Licensing and Registration System (LRS) is one of several activities planned to address this objective.

As part of the upgrading process two Workshops were held: (1) "First Workshop of Regional Experts to Review and Upgrade TIP and LRS Software Programs" and (2) "Second Workshop of Regional Experts to Review and Test the Alpha Version of the Upgraded TIP and LRS Software Programs". The first Workshop was held in St. Vincent and the Grenadines during the period July 25-27, 2001 and the second in Jamaica (November 6-10, 2001).

**The purpose of the second Workshop was to provide a forum for Regional Experts to discuss the test results on the alpha version of the upgraded programs; identify bugs and any other problem/s; and prepare recommendation for further development of the program.**

**The Workshop participants included delegates from The Bahamas (Mr. Michael Braynen), Barbados (Mr. Stephen Willoughby), Dominica (Ms. Sharon Coriette), Jamaica (Mr. Errol Bartley, Ms. Tricia Campbell, Ms. Shellene Reynolds and Mr. Stephen Smikle), St Lucia (Ms. Patricia Hubert and Ms. Sherill Barnwel-NRMU/OECS), St. Vincent and the Grenadines (Ms. Cheryl Jardine), Suriname (Mr. Mario Yspol) and Trinidad and Tobago (Mr. Calvin Alexander). The CARICOM Fisheries Unit (CFU) staff attending the meeting included the Scientific Director (Mr. Milton Haughton), Data Manager/Analyst and Coordinator of the Workshop (Ms. Merline Hemmings), Biologist/RAU Leader-Shrimp and Groundfish (Mr. Terrence Phillips) and Consultant (Dr. Paul Medley).**

**Prior to the commencement of the various presentations, the Scientific Director (Mr. Milton Haughton) outlined the objectives of the Workshop and the plan for testing the Alpha version of the software. The other sessions focused on:**

- **Presentation and Discussion of Comments Received from Participants. The participants presented and discussed the problems encountered while testing the alpha version of the software and made recommendations for improvements.**
- **Interactive Presentation and Discussion of the Alpha Version of the Software. The Consultant demonstrated and explained the detailed structure and operation of the program from installation to data entry, storage and reporting. Several suggestions for improvement and modifications were made.**
- **Testing and debugging the software program. The software was tested. The problems encountered and suggestions for improvements were recorded. These were presented later in the discussion of the software testing results sessions.**
- **Presentation and Discussion of the Software Testing Results. The participants presented and discussed problems encountered and made suggestions for modification.**

**In section I of this report a detailed account of the various sessions is given. The installation procedure is given in Appendix I; the alpha version of the software forms in Appendix II and the agenda and a list of participants in Appendix III.**

The follow-up activities include:

- **The Consultant will complete the Beta version of the software and distribute it to the working group members for testing.**
- **The Data Manager/Analyst (Ms. Merline Hemmings) will co-ordinate the testing of the software and production of a report of the results.**
- **Training of the Regional Trainers and Fisheries Departments staff.**

# **SECOND WORKSHOP OF REGIONAL EXPERTS TO REVIEW AND TEST THE ALPHA VERSION OF THE UPGRADED TIP AND LRS SOFTWARE PROGRAMS**

## **SECTION I**

### **SUMMARY OF WORKSHOP ACTIVITIES**

#### **TUESDAY, 6<sup>TH</sup> NOVEMBER 2001**

The Workshop commenced at about 9.20 a.m. The Scientific Director (CFU – Belize), Mr. Milton Haughton, welcomed the participants and apologised for the lateness or non-arrival of the Beta version of the software to most Member States. Subsequently, the Workshop participants introduced themselves. This was followed by a warm welcome on behalf of Jamaica by Miss Shelene Reynolds. Following the introductions the Scientific Director noted that the objective of the Workshop was to provide a forum for Regional Experts to discuss the test results on the alpha version of the upgraded programs; identify bugs and any other problem/s and prepare recommendations for further development of the program.

The delegates presented and discussed the difficulties encountered in testing the alpha version of the software program and made recommendations for further improvement. The salient points of the presentations are given below:

#### **Jamaica**

Miss Reynolds in her presentation explained that she had no problems installing in Windows 98 and 2000. Although, the instructions were easy to follow she felt that a shorter method of installation is needed.

#### **Suriname**

Mr. Mario Yspol in his general overview indicated that the procedure to install the program should be improved. More detailed comments are given below:

#### ***Installation***

- ☞ The error code parameter error message was encountered during installation.
- ☞ Ever so often the error code 12550 pop up.

#### ***Fishermen Registration***

- ☞ With fishermen registration it did not seem possible to link one fisherman to one boat.

### ***Vessel Registration***

- ⌘ Boat owners' registration is missing the field for the total number of boats the person owns.
- ⌘ Suriname also needs to be able to register the maximum number of fishermen working on a boat.

### ***Processing Facilities***

- ⌘ Satisfactory.

### ***Aquaculture Facilities***

- ⌘ Fields required for the following:
  - chemicals
  - antibiotic
  - type of food
  - type of waterused in the facilities.

### ***Trip Interviews***

- ⌘ Satisfactory, taking into account there will be pick lists.

### ***Issues/Comments***

Mr. Smikle suggested that the names of fishermen working on a particular boat along with the captain and boat owner, should be included in the database. Dr. Medley agreed that he would address the issue.

## **St. Vincent and the Grenadines**

Ms. Cheryl Jardine indicated that the CARIFIS software was tested on several computers using the Windows 98 and the Windows ME operating systems. However, the third installation had to be skipped for computers using the Windows ME operating systems, since the Visual Foxpro ODBC driver set up is not supported on Windows ME. Also, installation cannot be completed on computers that do not have Internet access. This will be a little problematic, since a backup of the program is normally on a computer that does not have Internet access.

It is expected that this new software will store all fisheries related information (trip interviews, biological data, registration of fishers, vessels, processing plant, aquaculture facilities, Licenses and all other contact information). The software was developed using DELPHI and Visual foxpro.

## ***INSTALLATION***

There are four steps before a complete installation of the program can be performed. Even though these steps appear to be simple, they can become very confusing to a user and this may result in a total loss of interest in using the program.

### ***Errors encountered***

- ∅ Installing on a computer without Internet access - “This product requires Microsoft Internet Explorer 4.01 SP2 or greater. Please exit setup and install the latest Microsoft Internet Explorer”.
- ∅ Installing on Windows ME (3<sup>rd</sup> Installation) – The Visual Foxpro ODBC Driver set up is not supported on Windows Millenium.
- ∅ On Closing the program – Error message “this program has performed an illegal operation and will be shut down” when “Close” is selected, a further error message appears “Exception Access violation in module ‘CARIFIS.EXE”.

## ***OBSERVATIONS***

| <b>TIP/LRS</b>                              | <b>CARIFIS</b>                  | <b>Comments</b>  |
|---|---------------------------------|--|
| 1. TIP AND LRS are two individual softwares | Combination of both TIP and LRS | It is advantageous to have two separate programs for (1) ease of data entry (2) Security of data and (3) The Licencing and Registration program is used by other institutions such as the Coast Guard etc. So it will not be wise to have the Catch and Effort data and Biological data floating around. |

| <b>TIP/LRS</b>               | <b>CARIFIS</b>           | <b>Comments</b> |
|------------------------------|--------------------------|-----------------|
| 2. In LRS there are separate | One form, which does not |                 |



|  |   |  |
|--|---|--|
| forms for Adding, Browsing, Deleting, Editing  | have a browser screen to list/browse all information at any one time. |  |
| *3. Separate application forms relevant to each country (Fisher, Vessels etc)  | Not Available   | Need to be able to print applications forms directly from the system   |
| *4. Proof of registration, and licence document relevant to each country (acts as legal document)  | Not available   | It is advantageous to have some sort of document generated from the system to give to the fishermen as a proof that they are a bonafide fishermen and their boat/boats can legally operate in the waters of SVG. |
| 5. Unique fisher ID # (5 digits)   | Has to be inputted manually   | A Unique fisher ID# is necessary. It should be generated automatically, which minimizes input errors. Need mechanism to allow for change.  |
| 6. Unique country marking for vessels which are automatically assigned, which minimizes input errors. Need mechanism to allow for changes. | Has to be inputted manually   | Need to be consistent with the vessel marking. Several years data have already been inputted with this unique marking system and this number is being recognized by most of the countries within the Caribbean.  |
| 7. All information relating to a particular table (fisher, vessel etc) easily identified   | Has several forms, difficult to relate information                    | One of the functions of a database is to organize data in a collection of stored files so as to eliminate data redundancy, and aid in proper data manipulation.  |
| 8. Clearly defined standard reports  | Not available   | Standard reports are needed by some countries to be consistent with the schedules within their fisheries regulations. However, This can be optional  |
| 9. TIP – Unique settings for each individual country   | Not available   | It is advantage to have unique settings for each country as data will be easily identified by analyst etc.   |
| 10. List of interviews can be viewed and printed   | Not available   | This can be optional   |

| <b>TIP/LRS</b>                      | <b>CARIFIS</b>          | <b>Comments</b>  |
|-------------------------------------|-------------------------|--|
| 11. CARICOM extraction for querying | Use of the query wizard | It is vital for a database system to have a proper mechanism in place for data |

|   |   |   |
|---|---|---|
|   |   | extraction. This must not be too complicated as different reports formats are needed on a regular basis by various institution. |
| 12. Unique interview number assigned to individual countries and is generated automatically | Has to be inputted manually             | A unique interview number easily identifies from which country the data is taken.   |
| 13. Easy one step installation for both programs  | Four steps before complete installation | Complicated installations will require specialised training, it is also time consuming and prone to operational difficulties.   |

\* without 3 and 4 the CARIFIS database will not be useful to SVG for implementation

## ***Concerns***

The general concerns are

- ⊗ Would it be possible to transfer data from the TIP and LRS software to the CARIFIS software – This is a vital prerequisite for adoption of CARIFIS.
- ⊗ Would the unique numbers for the vessel marking which is consistent with the nomenclature of markings at the regional and international levels (comprised of a two-digit country code followed by the registration number assigned by LRS and the first three characters of the port of operation ) be assigned automatically. This easily identifies where a vessel is from and its port of operation and is also vital.
- ⊗ Would the interview number for the trip interview retain the unique number consisting of the Two character state code, two character duty station codes and the five digit interview number (e.g SV0000001), which would allow easy identification of the country which the data was generated.
- ⊗ Would the generation of queries and reports be made simpler and less cumbersome?
- ⊗ Would the data saved in the CARIFIS software be compatible with other commonly used databases and other statistical packages such as SPSS, Minitab, Excel etc.
- ⊗ Would it be easy to upgrade the CARIFIS software without the intervention of the programmer/consultant. This is vital if a repeat of the problems encountered with TIP and LRS in this regard are to be avoided.

## ***Comments and Recommendations***

### Contact Table

- ∅ Need a browse/edit screen to view a listing of all contact on file
- ∅ The Address section can have approximately three or four lines so that a complete address can be typed in, forget the codes for “Village” and “Country”.
- ∅ It will be preferable if the date is written in the format MM/DD/YYYY

### Fishermen Table

- ∅ The field “emergency contact” should remain blank until a name is entered. I have noticed that when a name is selected for the fisherman, the contact is automatically updated with the next Identification Number.
- ∅ Instead of the Fisherman’s Name/Date of Birth, the combination could be Fisherman Name/Address or Fisherman Name/Operating Site
- ∅ The Field “Community” is not necessary in the Fisher Registry.
- ∅ Change the Label “Licence Permission and Exclusions to “Permission/Restriction or “Permit/Restrict”

### Vessel Table

- ∅ The field “type of fishing” could be renamed “fishery type”
- ∅ Fields in the gear section of “engine/gear need to be labelled appropriately
- ∅ The field “notes” should be renamed “special conditions” or Notes/Special conditions”
- ∅ Special forms need to be generated for reporting purposes. This will be in keeping with the forms set out in the St. Vincent and the Grenadines, Statutory Rules and Orders.

### **Trip Interview**

- ∅ What is the purpose of the field “Activity” in Trip?
- ∅ The field “TIP ID Code” should be renamed “Interview Number”
- ∅ Crew: There might be some difficulties getting the names of each crew member for every trip (Crews change regularly).

### **General**

- ∅ The CARIFIS software is still in its initial stages. At present it does not have the capabilities of TIP and LRS, hence most tasks cannot be performed effectively. There needs to be rapid development of the software to gain the confidence of the users, as

well as to enhance the efficiency of data entry. This is important as the first impression tends to be lasting and may adversely affect the eventual adoption of the programme.

- ⌘ There needs to be a smooth transition from one software (TIP / LRS) to the other (CARIFIS) so that data stored in the previous software will not have to be re-entered.
- ⌘ There needs to be some level of data protection from unauthorized users.
- ⌘ Fisheries personnel in the region need to have the necessary training in DELPHI programming to ensure the sustainability of the program.

### ***General Comments from the Fisheries Divisions SVG***

- ⌘ This database is less efficient than the current system. It can be regarded as a prototype with many areas for improvement. The only real advantage of this database is that it is Windows based.
- ⌘ There is not a proper mechanism in place to retrieve stored information (Query, backup etc)
- ⌘ In order for the software to be considered as a viable replacement for TIP and LRS, it must be able to at the very least
  - Duplicate or improve on all of the functions of TIP and LRS
  - Be more user-friendly re installation and usage.
  - Provide backward compatibility for previously entered data
  - Compatibility with other data-bases/statistical packages.
- ⌘ Unless there is significant improvement of the database, financial resources already spent would have been wasted. It must be noted that the agreement for development of the database made at the St. Lucia workshop, was to make TIP and LRS Windows based.
- ⌘ The Second beta version is keenly awaited so that further evaluation in light of the above can be made.

### **Trinidad & Tobago**

Mr. Calvin Alexander in his presentation informed the gathering, that in testing the software he encountered the following problems:

### ***General Comments***

- ⌘ Date - CFRAMP uses the American version i.e. mth/dy/yr while most CARICOM countries uses the British version i.e. dy/mth/yr.

- ⌘ The two digits formats prevent the analysis of data beyond 2000.
- ⌘ Special training will be required for personnel using the system.
- ⌘ The software crashes too often.
- ⌘ Some fish species are not included.
- ⌘ Query functions are too complicated, too many steps involved.

### *Issues/Comments*

Mr. Smikle raised the following queries during the discussion session:

- ⌘ He pointed out that the current system in Jamaica has three databases – LRS, Loan and TIP. He wanted to know if **CARIFIS had** these 3 databases?
- ⌘ Will there be problems with FoxPro?

Dr. Medley indicated that:

- ⌘ The database does not have the three databases that Jamaica currently has.
- ⌘ In the event that FoxPro is no longer supported, the driver and code will have to be upgraded, however, overall there will be no problems.

Mr. Smikle wanted to know if FoxPro would be accessible through the Internet or via the network connecting the 20 sub-offices and if data could be transferred via the Internet. The Consultant indicated that access was possible using Netscape Browser and a modem. However, data transfer would not be possible. He indicated that it would be easier if Delphi was used as the Server.

Dr. Medley mentioned that the queries would be written in Structured Query Language (SQL). He stated that if countries wanted to obtain some information that was not already coded he could write a query and e-mail this to them. The query would be executed in the query section of the database to obtain the requested information.

The Consultant explained that FoxPro does not allow definition of users access, at the field level. It was suggested that in the Aquaculture Facility Register a field should be inserted for culture types (e.g. intensive or semi-intensive). The legal charges section will be modified to accommodate one vessel having a number of charges. The Consultant agreed that these issues would be addressed.

**WEDNESDAY 7<sup>TH</sup> NOVEMBER, 2001**

**INTERACTIVE PRESENTATION AND DISCUSSION OF THE ALPHA  
VERSION OF THE SOFTWARE**

During these sessions the Consultant demonstrated and explained the:

- ∅ Installation process
- ∅ Database relationships
- ∅ Data fields
- ∅ Data Storage
- ∅ Data Entry
- ∅ Reporting
- ∅ Queries

The installation process was a major concern for most of the participants. The process is summarized below:

***Installation***

In demonstrating the installation procedure (see Appendix I for detailed installation procedure) the Consultant indicated that four installation folders (labeled 1<sup>st</sup> install; 2<sup>nd</sup> install; 3<sup>rd</sup> install and 4<sup>th</sup> install) were required. A summary of the installation steps are given below:

***Step One***

During this step the proprietary Microsoft Installer was installed using operating system specific executable files (that's "INSTMSI.EXE" for W95/98 and "INSTMSIW.EXE" for W2000/NT).

***Step Two***

Microsoft ODBC system was installed. This was done using the "mdac\_typ.exe" executable file located in folder "2<sup>nd</sup> install".

***Step Three***

The third step involves installing the Visual FoxPro ODBC driver by running the file "VFPOBDC.msi" located in folder "3<sup>rd</sup> install".

***Step Four***

During this step the application and the database are installed by running the setup executable file in folder "4<sup>th</sup> install".

***Step Five***

In the final stage the database is connected to the ODBC driver (see appendix I for more details).

### ***Issues/Comments***

Dr. Medley indicated that it is possible to simplify the installation process but this would require purchasing a piece of software that might cost about US\$1,000.00. The Scientific Director felt that the installation procedure need to be simplified and suggested that it would be, in the long run, more cost effective and beneficial to get the Installer Software.

## **Testing of Software by Workshop Participants**

Following the Consultant's presentation the participants formed three groups and proceeded to test the software. The testing of the Software began Wednesday afternoon and continued into Thursday morning.

There were some problems installing an edited version of the program on computers using the Windows 98 operating system due to some incompatibility. However, a previous version was installed to enable participants to familiarize themselves with the program and to proceed with some testing.

Participants worked in groups of three. Practical fisheries data were entered, as participants compared the capability, efficiency and integrity of this program with that of the TIP and LRS software used by most countries in the CARICOM region for the past several years (Ms. Cheryl Jardine, FD, SVG).

**THURSDAY 8, 2001**

## **Testing of Software by Workshop Participants**

During the morning session the groups continued the software testing. The findings were presented to the Working Group for discussions. Several suggestions/recommendations were made for the improvements of the software. To assist comprehension of the working group comments that follows, a summary of the software layout is given below:

### **Summary of the Application Layout**

The Main Menu of the Software Program consists of the following Sections:

- Registers and Licences
- Trip
- Legal Infractions
- Options
- Queries
- Tables

A detailed summary of each section is given below:

## **1. REGISTER AND LICENSES**

### **a. Fishermen**

- ***Fisher Register Window***
  - Register Form
  - Licence Form
  - Loans Form
  - Archive Form

### **b. Vessels**

- ***Vessel Register Window***
  - Register 1 Form
  - Register 2 Form
  - Licence Form
  - Archive Form

### **c. Processing**

- ***Processing Facility Register Window***
  - Register Form
  - Register 2 Form
  - License Form
  - Archive Form

### **d. Aquaculture**

- ***Aquaculture Facility Register Window***
  - Register Form
  - Register 2 Form
  - License Form
  - Archive Form

## **2. TRIP**

### **a. Trip Interviews**

- ***Trip Window***
  - Site Visit detail Form
  - Trip Form
    - Trip Details
    - Crew
    - Trip Costs
    - Effort
      - Effort Detail
      - Catch
        - Catch Details
        - Biological Sampling



3. LEGAL
  - a. Legal Charges Window
  
4. OPTIONS
  - a. Options Window
  
5. TABLES
  - a. Contact Window
  - b. Grounds Window
  - c. Gear Window
  - d. Site Window
  - e. Species Window
  
6. QUERIES
  - a. Query Window

## Discussion of the Alpha Version of the Software

Following the testing sessions the Working Group discussed the challenges encountered and made recommendations for improving the Software Program; the responses are presented below, summarized under these headings:

- Fishermen Register (A)
- Vessel Register (B)
- Processing Facility Register (C)
- Aquaculture Facility Register (D)
- Trip Interview (E)
- Query (F).

### *(A) Fishermen Registry*

- In the Fisher Registry Dialogue Box, if any of the pick list were selected for editing/modification and after opening the Window the action was not done, the Window refuse to close. Usually with programs having graphical interfaces it would be possible to close the Window by just clicking once or twice in a clear space outside the Window. A CANCEL button might be helpful here.
  
- It was suggested that *Registration Number* should be generated automatically by the computer and should be different from the *Identification Number*. Most participants

agreed that the *Identification Number* should only be associated with Fishers and not contact persons.

- Some participants wanted to know what would be recorded in the *Document* field. According to the Consultant, this field was for identification documents such as passports, national identification cards etc. It was also suggested that the field should be larger than it currently is.
- Problems were encountered in uploading pictures to the picture field. Some were too large and others were distorted. It was suggested that the size/dimensions of the picture should be determined prior to scanning to allow proper uploading.
- Some participants wanted to know the difference between the *Registration* and the *Expiry Dates*. Ms. Barnwell explained that some countries wanted to keep the first date the fisher was registered hence the need for a field labeled “First Issue”. However, it was suggested that this field should be removed from the Fisher Registry and be placed in a different section. The Consultant indicated that the *First Issue Data* will be fixed and will be removed from the Fisher Registry. Since registration is renewable it was suggested that the field labeled *Registration* should be re-labeled “*Renewal of Registration*”. It was suggested that Countries that did not need to use *Expiry Date* field should just leave it blank.
- The display of the person’s date of birth in the *Emergency Contact Name* field did not go down well with some participants. Some felt it should not be displayed at all and others felt that it should be displayed below the photograph. Dr. Medley indicated it was currently being used to identify fishers in the database and to maintain the integrity of the data in the existing database relationships.
- They were several queries with regards to the data element *Nationality* these included:
  - Whether a history of a person’s Nationality should be stored.
  - Where to display the information, whether on the Contact Form or the Fisher Registry Form.
  - Whether a table or a pick list for nationality should be created.
  - It was also suggested that nationality should be coded and it would be simpler to use the current Country codes.
- The display of codes or full names for some pick list was another area of disagreement. Some participants wanted full names, others were opting for codes. The Consultant indicated that a decision need to be made as the option chosen would determine the design of the forms.
- It was suggested that the name of the *Contact Form* should be changed to *Address Book*.

- Mr. Willoughby indicated that with regards to the *Emergency Contact Name* field if the *Find* button was selected you couldn't edit the displayed information. However, if the *Edit* button was selected the *Contact Form* appeared and it could be edited. To alleviate any confusion it was suggested that the *Find* button remain as is in function and appearance and the *Edit* button be modified to read "*Edit/Address Book*" and keep the existing editing function.
- To allow the addition of a *New Record* from within the *Fisher Registry*, it was suggested that a *New Contact* button be added to the *Contact Form* to facilitate this process.
- It was suggested that *Role* on the *Contact Form* be changed to *Relationship*.
- A lengthy discussion developed following a query by Ms. Hubbert as to what happens if a person's record was deleted and if the Identification Number could be re-used. The Consultant indicated that this was not possible as those numbers were used to build relationships. However, the *Registration Number* was changeable. It was suggested that editing might be the process to use instead of deleting.
- Mr. Willoughby wanted to know what kind of information would be entered in the *Note* field on the *License Form* situated in the *Fisher Register*. Ms. Barnwell explained that in the old version of the software this field was used to record the conditions under which the license was granted. It was suggested that the name of the field should be changed to *Condition/Notes*.
- A recommendation was made that a field, labeled *Size/Weight*, be added to the *License Permission* and *Exclusion Section* of the *License Form*.
- The name of the *Loans Form* will be changed to *Credit/Concession* and it was suggested that the form be removed from the *Fishers Register* to another part of the database.
- The Consultant in responding to a query, about what will happen to the data that is currently in TIP and LRS, indicated that the data will be transferred to the new database.

### **(B) Vessel Register**

- Some participants wanted to know what information would be entered on the *Register 1 Form*. In response to this query, it was indicated that this form would be used to enter information dealing with the description of the Vessel, while *Register 2* would deal with vessel activities/operations. Given this information it was suggested that the names of *Registers 1* and *2* should be changed to *Vessel Description* and *Vessel Activities/Operations* respectively.

- Ms. Reynolds wanted to know if it was possible to get a blank screen each time you go to open the *Vessel Registration*. The Consultant indicated that this was possible by first opening the *Vessel Register Window* then clicking the *Add* button.
- The Consultant indicated that the requirements for *Vessel Marking* were as follows:
  - Country code (5 digits)
  - LRS registration number (system generated 5 digits)
  - Port of operation (3 digits)
 Dr. Medley explained that if a country did not want to use the above procedure they could put in a *Marking Number* manually. The Jamaican participants indicated that they would like to be able to insert additional numbers after the computer-generated numbers. The consensus was that an International Vessel Marking System should be used.
- In the current database system if *Radio Call Signals* are entered it over rides the *Vessel Marking* data. Jamaica made it clear that they did not want this option that they needed both data element to be retained. Dr. Medley indicated that to prevent overriding, the data entry personnel could cut and paste the data.
- Participants indicated that it was necessary for the software to allow the data for more than one target species to be entered.
- It was decided that the *Concession* field would remain as is and each country would use the field as their needs dictate.
- The Suriname participant indicated that there was no way of distinguishing a foreign from a local vessel.
- The delegate from St. Lucia wanted to know how to find a single fisher. The Consultant explained that this could be done by typing the person's name.
- Ms Barnwell brought to the attention of the Working Group members that the *Status* field in the old program was used to add the data elements, "Foreign or Local" but currently it has "*Active or Inactive*" as the only options. The Consultant indicated that the new field *Nationality* could have a drop down list with foreign, local and a list of countries as the options.
- Mr. Phillipps wanted to know if gear data was recorded elsewhere in the database if it would be displayed automatically on the *Engine/Gear Form*. The answer was no it would not.
- One participant (Ms. Reynolds) wanted to know if you go to *Find*, on the *Licence Form*, if it's the fisher's license or the boat licence information that would be

displayed. According to the Consultant it would be the *Boat License*. He also indicated that the *Number* field on the *License form* would be changed to *Licence Number*.

- With Regards to *Archiving*, it was indicated that if a vessel changed ownership then it could be tracked by using *Role* in *Register 2* under the *Owners Section*.

**FRIDAY 9, 2001**

## **Discussion of the Alpha Version of the Software *cont'd***

### ***(C) Processing Facility Register***

- It was suggested that the contact person data should not be displayed in *Register 1* but in *Register 2*. The final decision was that it would remain on the *Register 1* form but renamed *Emergency Contact*.
- On *Register 1 Form* Mr. Willoughby wanted to know how would you add more than one brand name. The Consultant indicated that they could be listed in a memo field but it depends on what the individual wanted to do with them. Mr. Willoughby indicated that a memo field was not adequate for him, as in the Processing Plants in Barbados the brand name and species have to be monitored. The Consultant promised to return to this issue later.
- In the fourth section of the *Register 1 Form* it was suggested that the *Capacity* field label be changed to *Plant Capacity*.
- On the *Register 2 Form* the Consultant suggested changing the *Gear* field label to *Type of Processing*. Mr. Willoughby indicated that a field was needed for *Quantity*.
- On the *Licence Form* it was requested that the *Name* field label be changed to *Company Name*.

### ***(D) Aquaculture Facility Register***

- Suriname requested that the *Soil* field label be changed to *Pond Type* as they use concrete instead of soil for their ponds. The participant from Dominica indicated the need for a field to record the *Number of Ponds*.
- Ms. Barnwell suggested the addition of a field for *Renewal Date*, for consistency, on the *Register 1 Form*. The Suriname delegate also suggested adding a memo field to

allow countries to add inspection policy data; the Consultant agreed that this will be added.

- The *Register 2 Form* was considered to be okay. A request was made to add a *Delete* and an *Add* button for completeness. The Consultant indicated that a species table would be added to show a list of fish species.
- The *Name* field label on the *Licence Form* will be changed to *Company Name*.

#### **(E) TRIP Interview Register**

- The Working Group requested the renaming of the *Agent* field label to *Data Collector*.
- Ms. Reynolds asked if a field could be added to display the *Total Number of Boats*. The Consultant indicated that this would be done.
- It was suggested that *Report Area* field on *Trip Form* in the *Trip Interview Window*.
- On the *Trip Form* a request was made for an option to be inserted that would allow the data entry operator to type in *vessel name* or *vessel number* or *call sign* and the vessel data will automatically be displaced.
- Jamaican wanted an option that would allow them to track unregistered vessels and flag these vessels.
- Some participants wanted to delete the *Crew Form*, however, it was indicated that Jamaican needed this form.
- On the *Trip Details Form* it was suggested that the *Sampling Time* field label should be changed to *Duration Fish*.

#### **(F) Gear**

- A column for Dutch is missing from the gear table.

#### **(G) Query**

- The Consultant explained that to define a query there is a *Query Wizard* that assist in building a query by providing simple options for the user to choose from. He also indicated that the user, once familiar with SQL language, could build an query from scratch. He also said that he would create a tool to allow the different countries to export the query grid.

- The Consultant also indicated that the way to back up queries is to back up the database using Winzip.
- Ms. Jardine wanted to know if data for 10 years was stored on the system if accessing, for example, data for one year would take a long time. The Consultant responded by saying that it could take long, but a test run would have to be done. He suggested we cross that bridge when we get there.
- Mr. Smikle suggested that at the application level a security tool was required to allow Administrators full access and varying levels of access for different users. Ms. Barnwell suggested rights could be issued as follows: (1) Administrators, (2)LRS user, (3) TIP user and (4) Monitoring user. The Consultant said this would be addressed.

# **APPENDIX I**

## **Installation Procedure**



## Installation Procedure for CARIFIS Alpha Version

The program installs in four parts. The first three prepare Windows for the database connectivity. The last install puts in place the database and application. On the install CD there are four subdirectories, Install 1st to Install 4th, which should be installed in sequence.

**Install 1st:** If you are running in Windows NT or 2000 *double click* or *run* 'INSTMSIW.EXE', else *run* 'INSTMSI.EXE' and follow any instructions. This installs the Microsoft Installer. You may have to restart your computer.

**Install 2nd:** *Double click* or *run* 'mdac\_typ.exe', and follow any instructions. You will be required to accept the Microsoft licence agreement. This installs the Open Database Connectivity software (ODBC). You may have to restart your computer.

**Install 3rd:** *Double click* or *run* 'VFPODBC.MSM', and follow any instructions. This installs the Visual Foxpro Driver. If you have a problem, go back and try the installation again.

**Install 4th:** Finally, *double click* or *run* 'SETUP.EXE', and follow any instructions. This installs the application and database. You are advised to leave the install directories in the default values. Just choose 'Next' on the install wizard and finally *Finish*. *Close* the wizard on completing the install.

Finally, you must set up the ODBC connection by running the ODBC administrator. *Choose* 'Settings' from the **Windows** 'Start' menu. In Windows 2000, you must choose the 'Administrative Tools' subdirectory. Then choose the ODBC administrator (the name varies but they all have 'ODBC' in the name). *Choose* 'Add', and *select* the 'Microsoft Visual Foxpro Driver 6.01.8629.01'. Make sure the name and version number match this particular driver, otherwise the connection will not function. *Choose* **OK** and the Visual Foxpro Setup screen will be displayed. The following parameters should be entered:

**Data Source Name:** 'CARIFIS' (This must be written exactly)  
**Description:** 'Caribbean Fisheries Information System' (Anything can be entered)  
**Database type:** Choose 'Visual Foxpro Database (.DBC)' - This the default choice.  
**Path:** 'C:\CARIFIS\DATA\carifis.dbc' - You can also use browse to find the carifis.dbc file. The path should indicate where the database was installed, including the drive. The default location is given.

*Choose* **OK** and then close the administrator screen. The program should now be ready to run.

# **APPENDIX II**

## **Caribbean Fisheries Information System (CARFIS) Forms (*Alpha Version*)**

## THE MAIN MENU



# Fisher Register with the Register 1 Form Displayed

Fisher Register \_ □ ×

ID Fisherman's Name

0 UNKNOWN, . . . 1899/12/30 Find Edit

Register Licence Loans Archive

ID Emergency Contact Name

0 UNKNOWN, . . . 1899/12/30 find View

Status Community

DEAD AN02

Role Co-operative

CAPT

Operating Site UNKNOWN

Registration Number

Document asfa

Document Number sdfsafsafsa

Education Alternative Occupation

OLEV

Qualifications fsdfsdfalfhgfgf

Family Status Dependents

DIVO 8

Daughters 0 Sons 0

**Dates**

| Application | First Issue | Registration | Expiry     |
|-------------|-------------|--------------|------------|
| 2001/09/18  | 2001/09/03  | 2001/09/03   | 2002/09/20 |

⏪ ⏩ ⏴ ⏵

⏪ ✓ ✕ ↻

▲ Keep History

# FISHER REGISTER WITH THE LICENCE FORM DISPLAYED

The screenshot shows a software window titled "Fisher Register". At the top, there are fields for "ID" (containing "0") and "Fisherman's Name" (containing "UNKNOWN..."). To the right of these fields are "Find" and "Edit" buttons. Below this is a tabbed interface with "Register", "Licence", "Loans", and "Archive" tabs. The "Licence" tab is active, showing a form with the following sections:

- Type:** A dropdown menu set to "SPOR" and a small icon button.
- Number:** An empty text input field.
- Notes:** A large empty text area.
- Dates:** Four dropdown menus for "Application" (1999/02/05), "Issue" (1899/12/30), "Expiry" (1899/12/30), and "Renewal" (1899/12/30).
- Licence Permissions and Exclusions:** A table with columns "Area Used", "Gear", "Landing Site", and "Species". The table is currently empty.

On the right side of the form, there is a set of navigation controls including arrows and buttons for adding (+), subtracting (-), checking (✓), and deleting (X) items, along with a refresh (circular arrow) button.

# FISHER REGISTER WITH THE LOANS FORM DISPLAYED

**Fisher Register**

ID: 0 Fisherman's Name: UNKNOWN, , , 1899/12/30

Find Edit

Register Licence **Loans** Archive

Type: BANK Use: Engine Status: NORM

Dates: Start: 2001/10/01 End: 2006/10/01

Details: Total Amount: 50 Repayment Period: QUAR Repayment Amount: 0

**Fisher Register with the Archive Form Displayed**

**Fisher Register**

ID Fisherman's Name  
**0 UNKNOWN, . . . 1899/12/30** Find Edit

Register Licence Loans Archive

| ID | Date       | Education | Qualifications | Status | Fam. Stat. | Dependents | Daughters | Sons | Op. Site | Role |
|----|------------|-----------|----------------|--------|------------|------------|-----------|------|----------|------|
| 0  | 2001/09/01 | FEOLEV    | (MEMO)         | FSDEAL | FFDIVO     | 0          | 0         |      | 0        | FRC  |
| 0  | 2001/09/05 | FEOLEV    | (MEMO)         | FSDEAL | FFDIVO     | 0          | 0         |      | 0        | FRC  |
| 0  | 2001/09/07 | FEOLEV    | (MEMO)         | FSDEAL | FFDIVO     | 0          | 0         |      | 0        | FRC  |
| 0  | 2001/10/02 | FEOLEV    | (MEMO)         | FSDEAL | FFDIVO     | 0          | 0         |      | 0        | FRC  |
| 0  | 2001/10/03 | FEOLEV    | (MEMO)         | FSDEAL | FFDIVO     | 0          | 0         |      | 0        | FRC  |
| 0  | 2001/10/05 | FEOLEV    | (MEMO)         | FSDEAL | FFDIVO     | 0          | 0         |      | 0        | FRC  |
| 0  | 2001/10/06 | FEOLEV    | (MEMO)         | FSDEAL | FFDIVO     | 0          | 0         |      | 0        | FRC  |
| 0  | 2001/10/07 | FEOLEV    | (MEMO)         | FSDEAL | FFDIVO     | 0          | 0         |      | 0        | FRC  |
| 0  | 2001/10/08 | FEOLEV    | (MEMO)         | FSDEAL | FFDIVO     | 0          | 0         |      | 0        | FRC  |
| 0  | 2001/10/09 | FEOLEV    | (MEMO)         | FSDEAL | FFDIVO     | 0          | 0         |      | 0        | FRC  |

# Vessel Register with the Register 1 Form Displayed

The screenshot displays the 'Vessel Register' application window. At the top, the title bar reads 'Vessel Register'. Below the title bar, there are fields for 'ID' (containing '8') and 'Vessel's Name' (an empty text box). To the right of these fields are navigation buttons: 'First', 'Prior', 'Next', 'Last', 'Add', 'Delete', 'Post', and 'Cancel'. A 'Keep History' button with a red triangle icon is also present.

Below the navigation buttons is a tabbed interface with five tabs: 'Register 1' (selected), 'Register 2', 'Engine/Gear', 'Licence', and 'Archive'. The 'Register 1' tab contains several sections:

- Material:** A dropdown menu and a search icon.
- Dimensions:** 'Length' (0.00 m), 'Bredth' (0.00 m), 'Tonnage' (0), and 'Draught' (0.00 m), each with a numeric spinner.
- Builder:** A text input field.
- Place Built:** A text input field.
- Build Regulation:** A dropdown menu and a search icon.
- Year Built:** A numeric spinner set to 1900.
- Purchase Cost:** A numeric spinner set to 0.
- Marking:** A large empty text area.
- Radio Call Sign:** A text input field.
- Hull number:** A text input field.
- Port of Registration:** A dropdown menu.
- Description:** A large empty text area.
- Inspection:** A section with 'Status' (dropdown and search icon), 'Date' (dropdown), and 'Expiry' (dropdown).
- Dates:** A section with 'Application' (dropdown set to 2001/11/09), 'Registration' (dropdown), and 'Expiry' (dropdown).



# Vessel Register with the Register 2 Form Displayed

**Vessel Register**

ID: 8      Vessel's Name:

**Vessel Type**

Status:    
 Type:    
 Class:    
 Converted from:

**Operations**

Port of Operations:   
 Target Species:   
 Type of Fishing:    
 Usual Crew:    
 Storage:  
 Ice

**Concessions**

**Owners**

ID:  Name:   
 Role:

| ID | Name | Role |
|----|------|------|
| ▶  |      |      |
|    |      |      |

## Vessel Register with the Engine/Gear Form Displayed

Vessel Register
\_ □ ×

ID

**8**

Vessel's Name

First Prior Next Last

Add Delete Post Cancel

▲ Keep History

Register 1 | Register 2 | **Engine/Gear** | Licence | Archive

**Engine**

Type

Status

Make

Fuel

HP

Serial Number

Purchase Cost

Bought

Scrapped

| Type | Status | Make | Fuel | HP | Serial No. | Purchase | Bought | Scrapped |
|------|--------|------|------|----|------------|----------|--------|----------|
| ▶    |        |      |      |    |            |          |        |          |

**Gear**

Use

Material

Purchase Cost

| ID | Material | Param | Use | Size | Number | Purchase |
|----|----------|-------|-----|------|--------|----------|
| ▶  |          |       |     |      |        |          |

# VESSEL REGISTER WITH THE LICENCE FORM DISPLAYED

Vessel Register
\_ □ ×

|    |  |                                    |                                       |                                     |                                       |   |
|----|--|------------------------------------|---------------------------------------|-------------------------------------|---------------------------------------|---|
| ID | Vessel's Name                            | First                              | Prior                                 | Next                                | Last                                  | <input type="button" value="▲ Keep History"/> |
| 8  | <input style="width: 90%;" type="text"/> | <input type="button" value="Add"/> | <input type="button" value="Delete"/> | <input type="button" value="Post"/> | <input type="button" value="Cancel"/> |   |

Register 1 | 
 Register 2 | 
 Engine/Gear | 
 Licence | 
 Archive

Licence No:

|    |  |                                 |                                 |
|----|--|---------------------------------|---------------------------------|
| ID | Name   | find                            | View                            |
|    | <input style="width: 90%; background-color: yellow;" type="text"/> | <input type="button" value=""/> | <input type="button" value=""/> |

|   |  |   |
|---|--|---|
| Type  | Number                                   | Notes   |
| <input type="button" value="▼"/> <input type="button" value="↗"/> | <input style="width: 80%;" type="text"/> | <input style="width: 95%; height: 80%;" type="text"/> |

**Dates**

|  |  |  |  |
|--|--|--|--|
| Application                              | Issue                                    | Expiry                                   | Renewal                                  |
| <input style="width: 90%;" type="text"/> | <input style="width: 90%;" type="text"/> | <input style="width: 90%;" type="text"/> | <input style="width: 90%;" type="text"/> |

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| ◀ | ◀ | ▶ | ▶ | ▶ | ▶ |
| + | - | ✓ | ✕ |   |   |
| ↻ |   |   |   |   |   |

**Licence Permissions and Exclusions**

| Landing Site             | Gear | Species | Area Used |
|--------------------------|------|---------|-----------|
| <input type="checkbox"/> |      |         |           |
| <input type="checkbox"/> |      |         |           |
| <input type="checkbox"/> |      |         |           |

# Vessel Register with the Archive Form Displayed

The screenshot shows a software window titled "Vessel Register". At the top, there are fields for "ID" (containing the number 8) and "Vessel's Name" (with an empty text box). To the right of these fields are several buttons: "First", "Prior", "Next", "Last", "Add", "Delete", "Post", "Cancel", and a "Keep History" button with a red triangle icon. Below the input fields is a tabbed interface with five tabs: "Register 1", "Register 2", "Engine/Gear", "Licence", and "Archive". The "Archive" tab is currently selected. The main area of the window contains a table with the following columns: Date, Port, Status, Type, Class, Converted, Fishtype, Storage, Ice, Crewno, and Target Sp. The table is currently empty. Below the table is a section labeled "Concessions" with an empty rectangular box.

# Processing Facility Register with the Register 1 Form Displayed

The screenshot displays the 'Processing Facility Register' application window. At the top, the title bar reads 'Processing Facility Register'. Below the title bar, there are navigation buttons (back, forward, search, etc.) and a 'Keep History' button. The main form is divided into several sections:

- Top Section:** Contains 'ID' (value: 1) and 'Company Name' (value: A New Company).
- Navigation:** A set of buttons including 'Register', 'Register 2', 'Licence', and 'Archive'.
- Search Section (Red Border):** Contains 'ID' (value: 5) and 'Contact Name' (value: Lightbourne...), with 'find' and 'View' buttons.
- Company Details Section (Green Border):** Contains 'Company ID', 'Brand Name', 'Site' (value: Green Sand), and 'Conditions'.
- Application and Inspection Section (Green Border):** Contains 'Application' (value: 2001/11/09), 'Last Inspection' (value: 2001/11/22), 'Registration', and 'Expiry'.
- Production and Capacity Section (Green Border):** Contains 'Status', 'Exported' (0%), 'Capacity' (0%), 'Market', 'Regional' (0%), 'Local' (0%), 'Main Equipment Used', 'Product', 'In Production' (0%), 'Investment' (0%), 'Employees' (0%), and 'Main Species'.

## Processing Facility Register with the Register 2 Form Displayed

The screenshot displays the 'Processing Facility Register' application window. At the top, the title bar reads 'Processing Facility Register'. Below the title bar, there are fields for 'ID' (containing '1') and 'Company Name' (containing 'A New Company'). To the right of these fields are navigation buttons (back, forward, search, etc.) and a 'Keep History' button. Below the company name field are tabs for 'Register', 'Register 2', 'Licence', and 'Archive', with 'Register 2' being the active tab.

The main area is divided into several sections:

- Processing Type Section:** Contains dropdown menus for 'Fish Type', 'Sources', 'Market', 'Main Gear', 'Processing Type', and 'Grade'. Each dropdown menu has a small icon to its right.
- Table Section:** A table with columns: Gear, Fish Type, Sources, Market, Processing Type, Grade. The table is currently empty.
- Other Information Section:** A large text area for additional notes, currently blank.
- Owner Section:** Contains a sub-form with fields for 'ID' and 'Name' (highlighted in yellow), 'find' and 'View' buttons, and a 'Role' dropdown menu.
- Owner Table Section:** A table with columns: Contact ID, Name, Role. The table is currently empty.

# Processing Facility Register with the Licence Form Displayed

The screenshot displays the 'Processing Facility Register' application window. At the top, the title bar reads 'Processing Facility Register'. Below the title bar, there are several input fields and buttons. On the left, there are labels 'ID' and 'Company Name'. The 'Company Name' field contains the text 'A New Company'. To the right of these fields is a set of navigation buttons: a grid of four arrows (left, right, up, down), a '+' button, a '-' button, a checkmark button, and a 'Keep History' button. Below the 'Company Name' field is a tabbed interface with four tabs: 'Register', 'Register 2', 'Licence', and 'Archive'. The 'Licence' tab is currently selected. Below the tabs is a search area with a yellow-highlighted input field for 'ID' and 'Name', a 'find' button, and a 'View' button. Below the search area is a form with three main sections: 'Type' (with a dropdown menu and a help icon), 'Licence No.' (with an input field), and 'Other Information' (with a large text area). Below these sections is another row of four dropdown menus labeled 'Application', 'Issue', 'Expiry', and 'Date'. At the bottom right of the window is another set of navigation buttons, including a grid of four arrows, a '+' button, a '-' button, a checkmark button, an 'X' button, and a refresh button.

# Processing Facility Register with the Archive Form Displayed

The screenshot displays the 'Processing Facility Register' application window. At the top, the title bar reads 'Processing Facility Register'. Below the title bar, there are input fields for 'ID' (containing '1') and 'Company Name' (containing 'A New Company'). To the right of these fields are navigation buttons: a set of four arrows (left, right, up, down), a '+' button, a '-' button, a checkmark button, and a 'Keep History' button. Below the input fields is a tabbed interface with four tabs: 'Register', 'Register 2', 'Licence', and 'Archive'. The 'Archive' tab is currently selected. The main area of the window contains a table with the following columns: 'Date', '% In Prod.', 'Equip. Name', 'Investment', 'Species ID', 'Market', 'Product', '%Export', '%Region', and '%L'. The table is currently empty, showing only the header row. The window also features standard Windows-style window controls (minimize, maximize, close) in the top right corner.

| Date | % In Prod. | Equip. Name | Investment | Species ID | Market | Product | %Export | %Region | %L |
|------|------------|-------------|------------|------------|--------|---------|---------|---------|----|
|------|------------|-------------|------------|------------|--------|---------|---------|---------|----|



## Aquaculture Facility Register with the Register 1 Form Displayed

The screenshot displays the 'Aquaculture Facility Register' application window. At the top, the title bar reads 'Aquaculture Facility Register'. Below the title bar, there are navigation buttons (back, forward, search, etc.) and a 'Keep History' button. The main form is divided into several sections:

- Facility Information:** ID: 1, Company Name: Big Company.
- Navigation:** Register 1 (selected), Register 2, Licence, Archive.
- Contact Information:** ID: 1, Contact Name: Medley, Paul, A, 1964/03/13. Includes 'find' and 'View' buttons.
- Operational Details:**
  - Status: ACTI
  - Site: The Yard
  - Pond Type: SAND
  - Capacity: 50
  - Main Equipment Used: Grinders
  - Number of Ponds: 35
  - Area: 10
  - In Production: 15%
  - Employees: 15
  - Land Area: 25
  - Water Area: 25
  - Investment: 60
- Compliance Dates:**
  - Application: 2000/02/05
  - Last Inspection: 2000/04/09
  - Registration: 2001/10/10
  - Expiry: 2002/12/12

## Aquaculture Facility Register with the

## Register 2 Form Displayed

**Aquaculture Facility Register**

ID: 1      Company Name: **Big Company**

Register 1 | **Register 2** | Licence | Archive

---

**Pond Details**

Main Species: **SURGEON,OCEAN**      Farm: **ORNA**      Product Type: [ ]

Pond Size: **4**      Production: **0** t/yr      Capacity (t / yr): **0** t/yr

| Species ID | Pond Size | Farm   | Amount | Product | Capacity |
|------------|-----------|--------|--------|---------|----------|
| ▶ ACANBA   | 4         | AMORNA |        | AP      |          |

---

**Owner**

ID: 6      Name: **Jaffries, John, H., 1899/12/30**      Role: **CREW**

find    View

| Contact ID | Contact Name                   | Role  |
|------------|--------------------------------|-------|
| ▶ 6        | Jaffries, John, H., 1899/12/30 | ORCRE |

## Aquaculture Facility Register with the License Form Displayed

The screenshot displays the 'Aquaculture Facility Register' application window. At the top, the title bar reads 'Aquaculture Facility Register'. Below the title bar, there are navigation and control buttons: a set of four arrow buttons (left, right, up, down), a set of four buttons (+, -, up, down), a checkmark button, an 'X' button, and a refresh button. A 'Keep History' button is also present.

The main interface is divided into several sections:

- Company Information:** 'ID' is set to '1' and 'Company Name' is 'Big Company'.
- Navigation:** A tabbed interface with 'Register 1', 'Register 2', 'Licence', and 'Archive' tabs. The 'Licence' tab is currently selected.
- Search and View:** A search field contains 'Lightbourne, Jonas, A, 1966/10/03'. To the right are 'find' and 'View' buttons.
- Licence Details:**
  - Type:** A dropdown menu shows 'EXPT'.
  - Licence No.:** A text field contains '5765757'.
  - Other Information:** A text area contains 'Licence temporary'.
- Application Dates:** Four dropdown menus are arranged horizontally:
  - Application:** 2001/10/03
  - Issue:** 2001/10/05
  - Expiry:** (empty)
  - Renewal:** (empty)

At the bottom right of the main form area, there is another set of navigation and control buttons, including the same arrow, +, -, checkmark, X, and refresh buttons.

**Aquaculture Facility Register with the Archive Form Displayed**

**Aquaculture Facility Register**

ID: **1**      Company Name: **Big Company**

Register 1 | Register 2 | Licence | Archive

| Date       | %In Prod. | Eqp. Name | Investment | Ponds | Area | Land Area | Water Area | Capacity | Employ |
|------------|-----------|-----------|------------|-------|------|-----------|------------|----------|--------|
| 2001/10/03 | 15        | Grinders  | \$60.00    | 35    | 10   | 25        |            | 50       |        |
| 2001/10/07 | 15        | Grinders  | \$60.00    | 35    | 10   | 25        |            | 50       |        |

## Trip Window with the Site Visit Details Form Displayed

**Trip**

ID: 0      Site: Whitby      Date: 2001/10/04

Site Visit Details | Trip

Data Collector: Jaffries, John, H., 1899/12/30

Sample Period: Start: 2001/10/04      End: 2001/10/04

**Total Effort at Site**

Vessel Type: CABO      Vessel Class: III      Boats Fishing: 5      Total Boats: 6

| Vessel Type | Vessel Class | Boats Fishing | Total Boats |
|-------------|--------------|---------------|-------------|
| VTCABO      | VCIII        | 5             | 6           |

## Trip Window with the Trip Details Form Displayed

**Trip**

ID: 0      Site: Whitby      Date: 2001/10/04

Site Visit Details | Trip

ID: 0      Report Area: London

ID: 6      Vessel Name: Red Sox, XXXX, HGWT      Find      View

Trip Details | Crew | Trip Costs | Effort

Information Source: [ ]      Main Gear: TROT LINE

Interview Type: [ ]      Fishery: [ ]      Number of Co-operating Vessels: 1

Sampling Time Start: [ ] End: [ ]      Activity: [ ]      Days Fishing: 0      Days Out from Port: 1

TIP ID Code: [ ]      Reason for Termination: [ ]

Sampling Bias Type: [ ]      Number of Previous Trips: 0      In days: 0

Notes: [ ]

**Trip Window with the Crew Form Displayed**

Trip

ID: 0 Site: Whitby Date: 2001/10/04

Site Visit Details Trip

ID: 0 Report Area: London

ID: 6 Vessel Name: Red Sox, XXXX, HGWT Find View

Trip Details Crew Trip Costs Effort

ID: 4 Name: Lightbourne, Jonas, A, 1966/10/03 find View Role: —

| Crew ID | Crew Name                         | Role |
|---------|-----------------------------------|------|
| 4       | Lightbourne, Jonas, A, 1966/10/03 |      |

**TRIP WINDOW WITH THE TRIP COSTS FORM DISPLAYED**

**Trip** ID: 0 Site: Whitby Date: 2001/10/04

Site Visit Details Trip

ID: 0 Report Area: London ID: 6 Vessel Name: Red Sox, XXXX, HGWT

Trip Details Crew Trip Costs Effort

**Fuel**

|             |           |     |
|-------------|-----------|-----|
| Fuel Amount | Fuel Cost | Oil |
| 0           | 7         | 20  |

**Catch Costs**

|      |      |     |      |
|------|------|-----|------|
| Bait | Salt | Ice | Gear |
| 0    | 0    | 0   | 0    |

**Other**

|                |      |
|----------------|------|
| Loan Repayment | Food |
| 0              | 0    |

**Shares**

|        |                 |           |         |
|--------|-----------------|-----------|---------|
| Crew % | Boat / Engine % | Captain % | Owner % |
| 45     | 40              | 5         | 10      |

**Trip Window with the Effort Detail Form Displayed**



**Trip**

ID: 0 Site: Whitby Date: 2001/10/04

Site Visit Details Trip

ID: 0 Report Area: London

ID: 6 Vessel Name: Red Sox, XXXX, HGWT Find View

Trip Details Crew Trip Costs Effort

ID: 0

Gear: CADELL No. of Sets: 1 Hours: 12 Min. Depth: 40 m

Fishing Ground: Bell Cay No. of Gear: 1 Max. Depth: 55 m

Effort Detail Catch

| Gear ID | Fish. Ground ID | No. of Sets | No. of Gear | Gear Param | Hours | Min. Depth | Max. Depth | Other |
|---------|-----------------|-------------|-------------|------------|-------|------------|------------|-------|
| CADR    | 2               | 1           | 1           | 0.9        | 12    | 40         | 55         |       |
| BNKL    | 3               | 3           | 3           |            | 3     | 0          | 0          |       |

## TRIP WINDOW WITH THE CATCH DETAILS FORM DISPLAYED

ID: 0
Site: Whitby
Date: 2001/10/04

◀ ▶ +  
- ▲ ✓ ✕ ↻

Site Visit Details Trip

ID: 0 Report Area: London

ID: 6 Vessel Name: Red Sox, XXXX, HGWT
Find View

Trip Details Crew Trip Costs Effort

0
Gear: CADELL
No. of Sets: 1
Hours: 12
Depth: 40 m
Min. 40 m
Max. 55 m
Fishing Ground: Bell Cay
No. of Gear: 1
0.9

Effort Detail Catch

0
Species: CATFISH,GILLBACKERS
Market Category:
Landings: 2
Discards: 4
Weight Type:
Value: 19.00
Weight: 21.80
11.30 kg
Price: 1.69

Catch Details Biological Sampling

| Species ID | Market Category | Bycatch | Land. No. | Land. Weight | Wt. Type | Discard No. | Discard Weight | Value | Price | Other |
|------------|-----------------|---------|-----------|--------------|----------|-------------|----------------|-------|-------|-------|
| ARIIPA     | CM              |         | 2         | 21.8         | WT       | 4           | 11.3           | 19.00 | 1.69  |       |

# TRIP WINDOW WITH THE BIOLOGICAL SAMPLING-SAMPLES FORM DISPLAYED

**Trip**

ID: 0 Site: Whitby Date: 2001/10/04

Site Visit Details | Trip

ID: 0 Report Area: London

ID: 6 Vessel Name: Red Sox, XXXX, HGWT

Trip Details | Crew | Trip Costs | Effort

0 Gear: CADELL No. of Sets: 1 Hours: 12 Min. Depth: 40 m

Fishing Ground: Bell Cay No. of Gear: 1 0.9 Max. Depth: 55 m

Effort Detail | Catch

0 Species: CATFISH,GILLBACKERS Market Category: Landings: 2 Discards: 4 Weight Type: Value: 19.00

Weight: 21.80 kg Discards: 11.30 kg Price: 1.69

Catch Details | Biological Sampling

1 Sample Type: Catch Status: Number: 7 Weight Type: Length type:

Weight: 4.54 kg

Samples | Records

| ID | Samp. Type | Catch Status | Weight | Number | Wt. Type | Length Type | Other |
|----|------------|--------------|--------|--------|----------|-------------|-------|
| 1  | BT         | BC           | 4.54   | 7      | WT       | LT          |       |
| 2  | BT         | BC           | 0      |        | WT       | LT          |       |

# Trip Window with the Biological Sampling-Records Form Displayed

The screenshot shows the CARFIS software interface with the following data and settings:

**Trip Information:**  
 ID: 0, Site: Whitby, Date: 2001/10/04

**Site Visit Details:**  
 Report Area: London, Vessel Name: Red Sox, XXXX, HGWT

**Trip Details:**  
 Gear: CADELL, No. of Sets: 1, Hours: 12, Depth: 40-55 m, Fishing Ground: Bell Cay, No. of Gear: 1

**Effort Detail:**  
 Species: CATFISH,GILLBACKERSI, Market Category: [blank], Landings: 2, Discards: 4, Weight Type: kg, Value: 19.00, Price: 1.69

**Catch Details:**  
 Sample Type: [blank], Catch Status: [blank], Number: 7, Weight: 4.54 kg, Length type: [blank]

**Samples:**  
 Species Name: UNKNOWN, Number: 1, Start Length: 5.0, End Length: 5.0 mm, Weight: 4.54 kg, Sex/Maturity: [blank], Gonad Weight: [blank]

| Species ID | Number | Start Length | End Length | Weight | Sex/Maturity | Gonad Wt. | Other |
|------------|--------|--------------|------------|--------|--------------|-----------|-------|
|            | 1      | 5            | 5          | 4.54   | BX           | 0         |       |
|            |        | 0            | 0          | 0      | BX           |           |       |

**Age:**  
 Age Structure: [blank], Analysis Status: [blank], Sample Tag No.: [blank], Age: [blank]

# Legal Charges Form Displayed

The screenshot shows a software window titled "Legal Charges" with a standard Windows-style title bar. The interface is divided into several sections:

- Search Section 1:** A red-bordered box containing a search form with "ID" (value: 2) and "Name" (value: Smith, Julie, , 1965/05/19). It includes "find" and "View" buttons.
- Search Section 2:** A yellow-bordered box containing a search form with "ID" (value: 0) and "Vessel Name" (value: UNKNOWN, ,). It includes "Find" and "View" buttons. To its right is a navigation control panel with buttons for back, forward, home, end, and refresh, along with a plus sign.
- Charge Section:** A section with a red title "Charge" containing four input fields: "Charge" (dropdown menu with "AREA" selected), "Quantity" (spin box with "2.0" and "kg" unit), "Status" (dropdown menu), and "Sanction" (dropdown menu). Each dropdown menu has a small icon to its right.
- Officers Section:** A section with a red title "Officers" containing two dropdown menus: "Arresting" (with "Jaffries, John, H., 1899/12/30" selected) and "Charging" (empty).
- Dates Section:** A section with a red title "Dates" containing four dropdown menus: "Entry" (with "2001/11/06" selected), "Charge" (empty), "Expiry" (empty), and "Update" (empty).

# Options Form Displayed

The image shows a software dialog box titled "Options" with a blue header bar. The dialog contains four groups of radio buttons for selecting units. The "Weight Unit" group has "Kilograms" selected. The "Length Unit" group has "Metres" selected. The "Depth Unit" group has "Metres" selected. The "Fish Length Unit" group has "Millimetres" selected. At the bottom of the dialog are three buttons: "OK", "Cancel", and "Help". The "Cancel" button is highlighted with a dashed border.

| Category         | Option      | Selected |
|------------------|-------------|----------|
| Weight Unit      | Kilograms   | Yes      |
|                  | Pounds      | No       |
| Length Unit      | Metres      | Yes      |
|                  | Feet        | No       |
| Depth Unit       | Metres      | Yes      |
|                  | Feet        | No       |
|                  | Fathoms     | No       |
| Fish Length Unit | Millimetres | Yes      |
|                  | Centimetres | No       |
|                  | Inches      | No       |

# Contact Form Displayed

The screenshot shows a window titled "Contact" with a standard Windows-style title bar. The form is organized into several sections:

- ID:** A small circular icon next to the label "ID".
- Name Section:** A green-bordered box containing four input fields: "Forename", "Middle name", "Surname" (with the text "UNKNOWN" displayed), and "Nickname".
- Personal Info Section:** A green-bordered box containing:
  - "Date of Birth": A dropdown menu showing "1899/12/30".
  - "Sex": Radio buttons for "Male" and "Female".
  - "Role": A dropdown menu with a "Go" icon.
- Address Section:** A grey-bordered box containing:
  - Two large text input fields for the address.
  - "Village": A dropdown menu with a "Go" icon.
  - "Country": A dropdown menu showing "GUYA" with a "Go" icon.
- Phone / Email Section:** A grey-bordered box containing:
  - Four input fields for "Home", "Work", "Fax", and "Cellular" phone numbers.
  - An "Email" input field.
- Navigation:** A row of seven icons at the bottom: back, forward, home, search, plus, minus, and refresh.

## Fishing Grounds Form Displayed

|          | Code | Name      |
|----------|------|-----------|
| <b>0</b> | 0    | UNKNOWN   |
| <b>1</b> | 1    | West Side |
| <b>2</b> | 2    | Bell Cay  |
| <b>3</b> | 4    | Blue Cay  |
| <b>4</b> | 3    | Red Cay   |
|          |      |           |
|          |      |           |
|          |      |           |
|          |      |           |
|          |      |           |



## GEAR FORM DISPLAYED

| ID   | English                  | Spanish          | French  | PR Code | OECS Code | TIP Code | Param |
|------|--------------------------|------------------|---------|---------|-----------|----------|-------|
|      | UNKNOWN                  | DESCONOCIDO      | INCONNU |         |           |          |       |
| 25   | BOTTOM LONGLINE          |                  |         |         | BLIN      | 676      |       |
| BLIN | TROT LINE                | PALANGRE         |         | 107     |           | 676      |       |
| BNKL | BANKLINE                 |                  |         |         | BNKL      |          |       |
| BSNE | BEACH SEINE              | CHINCHORRO       |         | 100     | BSNE      | 030      |       |
| CADR | CADELL                   |                  |         |         | CADR      | 676      |       |
| CHIN | CHINESE SEINE            |                  |         |         | CHIN      | 145      |       |
| CHNE | CHINA NET                |                  |         |         | CHNE      | 425      |       |
| CNET | CAST NET                 | ATARRAYA         |         | 109     | CNET      | 735      |       |
| CTRP | CRAB TRAP                | TRAMPA DE JUEYES |         | 108     | CTRP      | 333      |       |
| DIVE | SKIN DIVING              | BUCEO DE PULMON  |         | 114     | DIVE      | 943      |       |
| DNET | DIP NET                  |                  |         |         | DNET      | 703      |       |
| FPOT | FISH POT(/ZTRAP/JACKPOT) | NASA             |         | 101     | FPOT      | 345      |       |
| GNET | GILL NET                 | TRASMALLO        |         | 103     | GNET      | 425      |       |
| HAND | BY HAND                  | A MANO           |         | 115     | HAND      | 955      |       |

  

**Description**

Indicates gear is unknown. Default value.

**Current Local Name**

English

Spanish

French

## Site Form Displayed

The screenshot shows a window titled "Site" with a globe icon. The window contains the following fields and controls:

- ID**: A text input field containing "0".
- Name**: A text input field containing "UNKNOWN".
- Port**: An empty text input field.
- District**: An empty text input field.
- Country**: A dropdown menu with a blue arrow icon and a right-pointing arrow icon.
- Type**: A dropdown menu with a blue arrow icon and a right-pointing arrow icon.

Navigation controls are located in the bottom right corner:

- Four arrow buttons: left, left, right, right.
- Buttons with symbols: a plus sign (+), a minus sign (-), a checkmark (✓), and a button labeled "Last".
- A circular refresh button.

## Species Form Displayed

Species
\_ □ ×

| ID    | Scientific Name      | Synonym | Common Name         | Local               | No |
|-------|----------------------|---------|---------------------|---------------------|----|
| ▶     | UNKNOWN              |         | UNKNOWN             | UNKNOWN             | 88 |
| ACAN  | ACANTHURIDAE         |         | SURGEONFISHES       | SURGEONFISHES       | 88 |
| ACANB | ACANTHURUS BAHIANUS  |         | SURGEON,OCEAN       | SURGEON,OCEAN       | 88 |
| ACANC | ACANTHURUS CHIRURGUS |         | DOCTORFISH          | DOCTORFISH          | 88 |
| ACAND | ACANTHURUS COERULEUS |         | BLUE TANG           | BLUE TANG           | 88 |
| ALBU  | ALBULIDAE            |         | BONEFISHES          | BONEFISHES          | 87 |
| ALBUV | ALBULA VULPES        |         | BONEFISH            | BONEFISH            | 87 |
| ALOPV | ALOPIAS VULPINUS     |         | SHARK,THRESHER      | SHARK,THRESHER      | 87 |
| ANABA | ANABLEPS ANABLEPS    |         | FOUREYES,LARGESCALE | FOUREYES,LARGESCALE | 88 |
| ANGU  | ANGUILLIDAE          |         | EELS,FRESHWATER     | EELS,FRESHWATER     | 87 |
| ANGUR | ANGUILLA ROSTRATA    |         | EEL,AMERICAN        | EEL,AMERICAN        | 87 |
| ANTE  | ANTENNARIIDAE        |         | FROGFISHES          | FROGFISHES          | 87 |
| APOG  | APOGONIDAE           |         | CARDINALFISHES      | CARDINALFISHES      | 88 |
| APOGM | APOGON MACULATUS     |         | FLAMEFISH           | FLAMEFISH           | 88 |
| ARIIA | ARIDAE (G: ARIUS)    |         | CATFISHES           | CATFISHES           | 87 |

Current Record

Description

Fishery

# Query Form Displayed

The screenshot shows a window titled "Query" with a description field containing "Description". Below this is a table with the following data:

| id | siteid | contactid | company                   | soil  | status | d_app      | d_ins      | d_reg    |
|----|--------|-----------|---------------------------|-------|--------|------------|------------|----------|
| 1  | 2      | 1         | Big Company               | AOSAN | ASACTI | 2000/02/05 | 2000/04/09 | 2001/10/ |
| 2  | 0      | 0         | Another Company           | AO    | AS     | 2001/10/07 |            |          |
| 3  | 0      | 0         | A small company           | AO    | AS     | 2001/10/07 |            |          |
| 4  | 0      | 0         | A Slightly Larger Company | AO    | AS     | 2001/10/07 |            |          |
| 5  | 0      | 0         |                           | AO    | AS     | 2001/11/09 |            |          |

Below the table is a query editor with the text "select \* from aqua". To the right of the editor are several buttons: "Apply Query", "Query Wizard", "Save Query", "Load Query", and "Print".

# **APPENDIX III**

## **Agenda**

## **Participants List**

SECOND MEETING OF WORKING GROUP OF REGIONAL EXPERTS TO  
REVIEW AND TEST THE ALPHA VERSION OF THE UPGRADED TIP AND LRS  
SOFTWARE PROGRAMS

November 6-9, 2001  
Kingston, Jamaica

**ANNOTATED AGENDA  
MONDAY, NOVEMBER 5**

Hotel check-in  
Check-in of participants.

**TUESDAY, NOVEMBER 6**

8:00 – 8:30 Registration of Participants

8:30 – 8:45 **Welcome and Introduction**

- Introduction of Country Delegates and invited Consultants
- Workshop Arrangements
- Adoption of Agenda and procedural arrangements

**9:30 - 9:45 COFFEE BREAK**

10:00 – 10:15 **Workshop Objectives, Expected Outputs and Overview of Plan to Review and Test the Alpha Version of the Upgraded TIP and LRS Software Programs.**

(Presenter: **Mr. Milton Haughton-Scientific Director, CFU**)

This presentation will outline the goals and objectives of the Workshop and the plan for Testing the Alpha Version of the Upgraded Windows version of TIP and LRS programs.

11:10 – 12.00 **Presentation and Discussion of Comments Received from Member States**

Participants will present and discuss the problems encountered in testing the alpha version of the Software Program and make recommendations for improvement.. Each participant will have 5-10 minutes for his or her presentation.

11:10 – 11.20 Report – The Bahamas

11:20 – 11.30 Report – Barbados

11:30 – 11.40 Report – Dominica

11:40 – 11.50 Report – Jamaica

11:50 – 12.00 Report – St. Lucia

12:00 – 12.10 Report – St. Vincent and the Grenadines

12:10 – 12.20 Report – Suriname

12:20 – 12.30 Report – OECS-NRMU

12:30 – 12.40 Report – CFRAMP (Dr. S. Singh-Renton and Mr. T. Phillips)

**12:40 – 1:40 LUNCH**

1:40 – 4:30      **Interactive Presentation and Discussion of the Alpha Version of the Software**  
**(Presenter: Dr. Paul Medley)**  
In this session the Consultant will demonstrate the installation and operation of the software. The participants will discuss, comment and make suggestions for improvements and modification.

***WEDNESDAY, NOVEMBER 7***

9:00 – 12:00      **Interactive Presentation and Discussion of the Alpha Version of the Software**  
**(Presenter: Dr. Paul Medley)**  
In this session the Consultant will demonstrate the installation and operation of the software. The participants will discuss, comment and make suggestions for improvements and modification.

***12:00 – 1:00      LUNCH***

1:00 – 4:00      **Testing of Software by Workshop Participants**  
Participants will be work in groups during the testing of the software. They will identify any difficulties encountered and make recommendations for improving the software.

**THURSDAY, NOVEMBER 8**

9.00 – 12:00      **Testing of Software by Workshop Participants**  
Participants will be work in groups during the testing of the software. They will identify any difficulties encountered and make recommendations for improving the software.

***12:00 – 1:00      LUNCH***

2:00 – 4:00      **Presentation and Discussion of the Test Results Alpha Version of the Software**  
**(Presenter: Dr. Paul Medley)**  
In this session the participants will discuss the test results and make suggestions for improvements and modification.

**FRIDAY, NOVEMBER 9**

9.00 – 12:00      **Presentation and Discussion of the Test Results Alpha Version of the Software**

In this session the participants will discuss the test results and make suggestions for improvements and modification.

**12:00 – 1:00**     **LUNCH**

2:00 – 4:00     **Presentation and Discussion of the Test Results Alpha Version of the Software**  
**(Presenter: Dr. Paul Medley)**  
In this session the participants will discuss the test results and make suggestions for improvements and modification.

SATURDAY, NOVEMBER 9

8:00             Hotel Check-out  
Check out and departure of some



## LIST OF PARTICIPANTS

### **The Bahamas**

Mr. Michael Braynen  
Director of Fisheries  
Department of Fisheries  
P.O. Box N-3028  
Nassau  
The Bahamas  
Tel: 242-393-1777  
Fax: 242-393-0238  
E-mail: mbraynen@batelnet.bs  
fisheries@batelnet.bs

### **Barbados**

Mr. Stephen Willoughby  
Chief Fisheries Officer (Ag)  
Fisheries Division  
Hincks Street  
Princess Alice Highway  
Bridgetown  
Barbados  
Tel: 246-427-8480  
Fax: 246-436 9068  
E-mail: fishbarbados@caribsurf.com

### **Dominica**

Ms. Sharon Corriette  
Fisheries Officer  
Fisheries Division  
Bay Front  
Roseau  
Dominica  
Tel: 767-448 2401/0140  
Fax: 767-448 0140  
E-mail: cfra@cwdom.dm

### **Jamaica**

Mr. Stephen Smikle  
Director, Marine Branch  
Fisheries Division  
Ministry of Agriculture  
P.O. Box 470  
Marcus Garvey Drive, Kingston 13  
Jamaica  
Tel: 876-923-8811/8812/8813  
Fax: 876-923-7572  
E-mail: fisheries@cwjamaica.com

### **Jamaica**

Ms. Shellene Reynolds  
Data Entry Operator/Regional Trainer  
Fisheries Division  
Ministry of Agriculture  
P.O. Box 470  
Marcus Garvey Drive, Kingston 13  
Jamaica  
Tel: 876-923-8811/8812/8813  
Fax: 876-923-7572  
E-mail: fisheries@cwjamaica.com

### **Jamaica**

Ms. Shellene Reynolds  
Data Entry Operator/Regional Trainer  
Fisheries Division  
Ministry of Agriculture  
P.O. Box 470  
Marcus Garvey Drive, Kingston 13  
Jamaica  
Tel: 876-923-8811/8812/8813  
Fax: 876-923-7572  
E-mail: fisheries@cwjamaica.com

### **Jamaica**

Mr. Errol Bartley

### **St. Lucia**

Ms. Patricia Hubert

Chief Fisheries Instructor  
Fisheries Division  
Ministry of Agriculture  
P.O. Box 470  
Marcus Garvey Drive, Kingston 13  
Jamaica  
Tel: 876-923-7571/923-8811/8812/8813  
Fax: 876-923-7572  
E-mail: fisheries@cwjamaica.com

**St. Lucia**

Ms. Sherrill Barnwell  
Information Technology Officer  
Natural Resource Management Unit  
Organisation of Eastern Caribbean States  
P.O. Box 1383  
Castries  
St. Lucia  
Tel: 758-452 1847/453-6208/451-8930  
Fax: 758-452 2194  
E-mail: sbarnwell@oecs.org  
sbarnwell@oecsnrmu.org

**Suriname**

Mr. Mario Yspol  
Fisheries Officer  
Fisheries Department  
Ministry of Agriculture, Animal Husbandry &  
Fisheries  
P.O. Box 1807  
Cornelius Jongbauwstrat 50  
Suriname  
Tel: 597-476 791  
Fax: 597-424 491  
E-mail: visserijdienst@sr.net

Fisheries Assistant  
Department of Fisheries  
Ministry of Agriculture, Forestry & Fisheries  
Castries  
St. Lucia  
Tel: 758-452 6172  
Fax: 758-452 3853  
E-mail: deptfish@slumaffe.org

**St. Vincent and the Grenadines**

Ms. Cheryl Jardine  
Senior Fisheries Assistant-Data/Regional Trainer  
Fisheries Division  
Ministry of Agriculture, Lands & Fisheries  
Kingstown  
St. Vincent and the Grenadines  
Tel: 758-452 6172  
Fax: 758-452 3853  
E-mail: deptfish@slumaffe.org

**Trinidad and Tobago**

Mr. Calvin Alexander  
Agriculture Assistant I  
Department of Marine Resources and Fisheries  
T.L.H. Building  
Milford Road  
Scarborough  
Tobago  
Tel: 868-639 1382/868-639 4354  
Fax: 868-639 1382  
E-mail: calvinalexander@hotmail.com

**Consultant**

**CARICOM Fisheries Unit Staff**

Dr. Paul Medley  
Consultant  
Sunny View main Street  
Alne  
United Kingdom  
Tel: 44-1347 838236  
Fax: 44-1347 838236  
E-mail: paul.medley@virgin.net

Mr. Milton Haughton  
Scientific Director  
CARICOM Fisheries Unit-Belize  
Belize City  
Belize C.A  
Tel: 501-2 34443/4  
Fax: 501-2-34446  
E-mail: haughton@caricom-fisheries.com

**CARICOM Fisheries Unit Staff**  
Mr. Terrence Phillips  
RAU Leader-Shrimp & Groundfish/Biologist  
CARICOM Fisheries Unit-SVG  
Third Floor Corea's Bldg  
Halifax Street  
St. Vincent and the Grenadines  
Tel: 784-457 3474  
Fax: 784-456 3475  
E-mail: terrencephillips@vincysurf.com

**CARICOM Fisheries Unit Staff**  
Ms. Merline Hemmings  
Data Manager/Analyst  
CARICOM Fisheries Unit-Belize  
Belize City  
Belize C.A.  
Tel: 501-2 34443/4  
Fax: 501-2-34446  
E-mail: mhemmings@caricom-fisheries.com  
merlhr@yahoo.com

