Improved Commercial Blue Crab Electronic Reporting In Cooperation with the Virginia Waterman’s Association

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October 2015

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Virginia Institute of Marine Science
Virginia Sea Grant-Affiliated Extension
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Project Summary

Listed below are the Project Description, Project Objectives and Planned Outcomes taken directly from the Virginia Sea Grant Marine Extension Program: Fisheries and Aquaculture’s 2014-2016 proposal. Also included in this report are the Project Activities by Virginia Sea Grant-Affiliated Extension Specialist Robert Fisher as well as a listing of the Project Collaborators/Partners.

Instrumental to the success of the project activities was the additional project funding that was awarded to the Virginia Waterman’s Association. Funding was provided by the Virginia Fishery Resource Grant Program (FRG) in the amount of $21,413. This FRG project period covered July 1, 2013 to December 31, 2014. A copy of the FRG final report submitted by the Virginia Waterman’s Association is included in this report as Appendix A.

Project Description

The Virginia Marine Resource Commission (VMRC) developed a web-based harvest reporting system in 2009 for all commercial fisheries in Virginia, though only a few crabbers have adopted use of that tool and remain reporting catch data via paper harvest reports mailed into VMRC monthly. Upon receipt of paper reports, VMRC checks for accuracy, makes corrections, the outsource reports for data entry into a database. The process is time consuming for both the waterman and VMRC and creates a substantial lag time (up to 3 months) between harvest and verification by management. In 2012, crab industry members requested additional fishing days, but due to the back-log of paper reporting, VMRC was not able to verify harvested levels. Due to budget constraints, VMRC have not been able to conduct outreach training sessions to encourage use of the electronic reporting system. Electronic reporting is supported by the Virginia Blue Crab Industry Panel, a commercial crab industry-lead group supported by VMRC and Environmental Defense Fund (EDF). The Industry Panel is interested in improving harvest accountability within the fishery to improve long-term management and harvest restrictions. VASG MEP is in position to provide this outreach component to facilitate management effort. In partnership with the Blue Crab Panel, EDF and VMRC, it is proposed to complete the objectives outlined below.

Project Objectives

Provide facilitation of four outreach sessions through coastal Virginia to discuss the benefits of electronic reporting system, demonstrate the current system, and train industry volunteers on its use. To increase awareness of its use amongst Virginia crabbers and crab buyers, identify potential improvements to the current system, and increase the number of crabbers who report electronically. Feedback from participants will be compiled into a report at the conclusion and provided to VMRC and VASG.

Project Outcomes

Increased adoption of the electronic reporting would allow more efficient reporting by the commercial fishermen resulting in the information being more readily available to VMRC for fishery management purposes. VMRC provided quantification of the pick-up of the technology in terms of number of watermen using new technology to report. At the completion of this project, the use of the electronic reporting option had expanded threefold growing from 71 to 213 commercial crabbers on the system.

Project Activities

• Project funding was awarded to the Virginia Waterman’s Association by the Virginia Fishery Resource Grant Program (FRG). The project period covered July 1, 2013 to December 31, 2014. The amount of funding provided was $21,413.

• VIMS MAS staff provided guidance and participation in the outreach workshops.
A series of outreach workshops were conducted and specifics are included below.

Electronic Harvest Reporting workshop in Gwynn's Island, Virginia on June 25, 2014. Provided audio-visual equipment and advisory for FRG project meeting targeting local blue crab harvesters, FRG/VASG sponsored (Attendance: 11).

Electronic Harvest Reporting Training and Outreach at Rappahannock Community College, Glens, Virginia on September 25, 2013. Provided audio-visual equipment and advisory for FRG project meeting targeting local blue crab harvesters, FRG/VASG sponsored (Attendance: 12).

Electronic Harvest Reporting Training and Outreach at Eastern Shore Community College, Melfa, VA (Eastern Shore) on October 2, 2013. Provided audio-visual equipment and advisory for FRG project meeting targeting local blue crab harvesters, FRG/VASG sponsored (Attendance: 4).

Electronic Harvest Reporting Training and Outreach on Tangier Island, Virginia on October 3, 2013. Provided audio-visual equipment and advisory for FRG project meeting targeting local blue crab harvesters, FRG/VASG sponsored (Attendance: 15).

The Virginia Waterman's Association submitted its final report to the Virginia Fishery Resource Grant Program. A copy of this report is included as Appendix A and can be found at: http://www.vims.edu/research/units/center-spartners/map/frg/reports/docs_frg_reports/FRG2013_09_VWA.pdf

Project results were reported to the Virginia Marine Resources Commission (VMRC) and resulted in improvements to the reporting process. Overview of the reporting process can be found at: http://www.vacrabbers.com/electronic-harvest-reporting/

As a direct result of the project, VMRC produced an Electronic Harvest Reporting Informational Flyer. A copy of this informational flyer is included as Appendix B and can be found at: http://www.vacrabbers.com/wp-content/uploads/2013/08/ElectronicHarvestReporting_1pg_Final.pdf

Feedback from the workshop participants is provided in Appendix A as part of the FRG final report by the Virginia Waterman’s Association.

Project Collaborators/Partners

- Virginia Waterman's Association
- Virginia Marine Resources Commission
- Virginia Blue Crab Industry Panel
- Environmental Defense Fund
- Chesapeake Environmental Communications
- Rappahannock Community College
- Eastern Shore Community College
- Tangier watermen
Appendix A

Final Report, *Harvest Reporting Training and Outreach*, submitted by Mr. Ken Smith, President of the Virginia Waterman’s Association to the Virginia Fishery Resource Grant Program (Reference Project No. 2013-09).
Final Progress Report  
Fishery Resource Grants Program  

Electronic Harvest Reporting Training and Outreach  
Project Investigator, Ken Smith  
Project Period: July 2013-December 2014  

Project Summary  
Widespread adoption of electronic harvest reporting was identified as a goal for both Virginia Marine Resources Commission (VMRC) and Virginia’s Blue Crab Industry Panel (“Panel”) – a commercial crab industry-led group, supported by VMRC and Environmental Defense Fund (EDF), working on ways to improve the long-term sustainability of Virginia’s blue crab fishery and fishermen. VMRC requires that Virginia’s commercial watermen report daily harvest on a monthly basis. The time between traditional paper harvest report submission and data availability ranges between 3-4 months due to data entry and QA/QC. This lag time has very real economic and environmental consequences and hampers the ability for managers and watermen to use current data to make mid-season adjustments. Electronic harvest reporting can greatly reduce the processing time and create a more efficient management system. In 2009, VMRC developed their own web-based harvest reporting system for all commercial fisheries in Virginia. However, when our project began in September 2013, only 71 of the 3,500 commercial watermen were registered to use the online system. Forty (40) of those 71 held some form of a crab license.

The purpose of our project was to conduct several (5-6) outreach workshops, specifically aimed at crabbers, to increase the number of crabbers reporting harvest through VMRC’s online system. VMRC had not previously conducted outreach to encourage the use of the online system. We held 3 outreach sessions in 2013 (Middle Peninsula in Glenns; Eastern Shore in Melfa; and Tangier Island) and 2 in 2014 (Yorktown and Gwynn’s Island). In addition to the physical outreach sessions, we were able to create a short tutorial video because many interested watermen were unable to attend any of our outreach workshops, FAQ, and a step-by-step visual instruction guide- all of which are available through VMRC’s website and the Panel website (www.VaCrabbers.com).

To wrap up our project, we conducted a user survey of all watermen reporting through the online harvest tool. Out of 261 total users, 71 responded to the online survey. The results and analysis of their responses is included in this report. In short, watermen who use the online reporting system greatly prefer it to paper submissions. The primary recommendations we identified were: 1) more outreach is needed to let watermen know about the online system; 2) some form of incentives (e.g., reduced license fees, striped bass tags, etc.) would encourage more watermen to use the system and close the time lag created by paper reporting; and 3) that VMRC could simplify the online system to make it even easier to use, for example we heard repeatedly that the requirement to change passwords every 90 days or be
locked out was onerous to watermen. Another frequent recommendation among users was that VMRC build in an easier method to access archived harvest records and possibly some simple analytical tools.

We believe this project was very successful in increasing the number of crabbers reporting harvest electronically. When the project began, 71 watermen were using the online reporting system. Over the course of this project we have seen an ~250% increase in the number of online harvest reporter users. As of November 2014, 247 online harvesters were registered and 121 of those have crab gear licenses. This represents a 202% increase in the number of crabbers reporting harvest electronically.

**Work Plan**
The originally proposed plan of action included:

1. Developing messaging and outreach materials
   a. Craft outreach strategy to ensure workshops are well attended and result in recruitment of 40-50 crabbers willing to commit to electronic harvest reporting for the next 12 months.
   b. Develop a flyer about the program that crab buyers can distribute to the crabbers they purchase from.
   c. Draft and mail a letter to all crabbers. The letter would introduce the concept of electronic harvest reporting, explaining the benefits it can provide, and announce dates and locations of initial workshops.

2. Convene 2-3 initial outreach workshops
   a. Target communities with high numbers of crabbers, including Gloucester/Mathews, Northern Neck, Hampton Roads, lower Eastern Shore, and Tangier.
   b. Workshops would educate and recruit watermen into the pilot program.
   c. Sea Grant staff would facilitate the workshops.
   d. Outreach materials would be distributed at the workshops, including an overview of how the online system works.
   e. Interested watermen would be asked to sign-up for reporting at the workshop and commit to using the system over the next calendar year.

3. Develop an Evaluation Process
   a. Establish a process for follow-up after initial workshops
   b. Develop metrics and evaluation criteria to assess participant experiences, system use-ability, and potential improvements
   c. Develop a mechanism to track user experiences throughout the pilot program
4. Summarize Results
   a. Convene 3-4 post-pilot program workshops around the state to collect user experiences
   b. Develop a final report for VMRC that summarizes user experiences, areas that could be improved upon, potential system modifications, and the longer-term outlook for electronic harvest reporting for crabbers and dealers.

Overview
Our project team accomplished what we proposed in the initial work plan. Additionally, we were able to secure external partner funds to develop a video tutorial and a step-by-step visual users’ guide that have been very helpful. Even though we held the proposed number of outreach workshops, we would not recommend this approach in the future due to the low number of participants who participated in the events. Instead of holding stand-alone Electronic Harvest Reporting workshops, we believe it would be much more effective to piggyback introductory and training demonstrations with other meetings that watermen are attending (e.g, watermen association meetings, marine trade events, VMRC meetings, etc.). We tried to encourage watermen to attend our meetings by having watermen personally extend the invitations and lead the workshops, by holding the workshops within communities that had expressed an interest in learning about the system, and providing refreshments.

Even though few watermen participated in the workshops, we received a large number of phone calls and emails from those interested in learning about Electronic Harvest Reporting. Between those one on one conversations and our follow-up provision of the video tutorial, instructional guide (Attachment A), and an FAQ, we were able to make significant in-roads with the commercial crabbing industry. We originally hoped to recruit an additional 40-50 crabbers to report harvest electronically. Our project led to the addition of 81 new crabbers to the online reporting system- about twice the number we had expected.

We found that most users were initially hesitant about using an online tool for harvest reporting. Many reported that they either did not previously know about the system or were intimidated by online reporting. However, once users were introduced to the system and the benefits of reporting harvest online, they began to embrace its ease of use, the timesavings, and access to archived data. These and other findings were also supported in our User Evaluation Survey. While the current reporting tool is not difficult to use, the format could be more user friendly. Many of the elements are not intuitive so the step-by-step guide and video demonstration are necessary to understand system requirements and shortcuts. For example, first time users have to establish a user name and password but the system did not provide the criteria for passwords, resulting in an error for almost every first-time user. The watermen we worked with had several questions about the tool and reporting requirements, the answers to which were not immediately obvious. This led to the development of the living FAQ (Attachment B). The User Survey and results are included as Attachment C.
Methods
To accomplish our goals of increasing awareness about EHR and usage of VMRC’s tool, we developed several outreach methods. We initially developed the list of main advantages of using EHR to be consistent across outreach activities and products. The three main advantages of EHR are: 1) saves time over paper reporting, 2) allows harvesters access to all of their archived data records, and 3) reduces lag times between harvest and management action because paper reporting can take 3-4 months of processing time- a full season.

Our project team selected workshop locations based on densities of commercial crabbers in that area. We held workshops in Glenns, Melfa, Tangier Island, Yorktown, and Gwynn’s Island. We communicated with crabbers about the workshops in several different ways. We sent a flyer about the overall project, outreach meeting locations and dates, and advantages of EHR to all licensed crabbers via the mailing list provided by Stephanie Iverson at VMRC. Stephanie Iverson also provided email addresses (when available) for crabbers in the immediate vicinities of our outreach workshop so we could follow up with them directly. During the week of the Glenns and Melfa workshops, we arranged a radio interview with Neal Steele’s morning show on Gloucester’s Xtra 99.1 because the local community colleges (Rappahannock and Eastern Shore Community Colleges) were hosting the outreach sessions. For all of the outreach sessions, we posted flyers in highly visible places for each locality (e.g., Post Office bulletin boards, marinas, bait shops, grocery stores, etc.). Blue Crab Panel members also made direct watermen to watermen phone calls to encourage crabbers to attend the sessions. Despite these efforts, attendance at all workshops was very low with attendance ranging from a high of 12 (Glenns) to a low of 1 crabber (Melfa).

The low attendance at workshops was somewhat balanced however by direct contact from interested crabbers and their family members. CEC and other project team members received more than two dozen direct calls and emails with requests for information on how to begin reporting harvest via the online tool. All of those calls and emails were from crabbers, or crabber’s family members, who had heard about the outreach meetings through one of the methods described above. We were able to follow up directly with all of those that expressed interest and send them the step by step guide, the video demonstration, the FAQ, and Stephanie Iverson’s direct contact information to establish a new account.

In November 2014, our project team developed an online survey of users to evaluate their user experience and document any recommendations they had for changes to the system. The short survey completed via Survey Monkey was reviewed by Stephanie Iverson at VMRC prior to distribution to crabbers. Ms. Iverson provided emails for the 247 registered online reporting harvesters. Of those 199 held a 2014 commercial registration and 121 of those 199 held a crab gear license. The survey was sent to all 247 registered users in order to assess broad user perspectives. The survey was open for two weeks; it began on November 12, 2014 and closed on November 26, 2014. Two emails were sent to users, the first on November 12 to invite their participation and a reminder on
November 24th. Of the 247 users that were requested to participate in the survey, 71 responded. No one indicated they needed more time to complete the survey or the deadline could have been extended. The complete user survey and responses are included as Attachment C.

Recommendations
The project team identified main recommendations for EHR as a result of our outreach efforts and survey responses.

1.) VMRC and partner groups should continue outreach and marketing of the online harvest reporting system to make users aware of its existence and advantages;

2.) User incentives should be employed to attract new users and acknowledge participation among existing users. These incentives don’t have to be large. Recommendations for incentives included reduced license/renewal fees or priority access to other fisheries like rockfish tags.

3.) Users consistently identified the need for a few technical changes to the system:
   - The requirement of a new password every 90 is so onerous to most watermen that they often give up after the first expiration. The password requirements themselves are difficult and not intuitive for users and the criteria is not listed on the VMRC system page. Users are asked to create a password when signing up for an account but are not given the criteria for number of characters and inclusion of numbers and symbols. VMRC is using security criteria developed by Virginia Information Technology Agency (VITA). VITA has set the rule that all state website passwords must be changed every 90 days to protect website security, so this recommendation may have to be discussed with them. The only alternative is that watermen users be made very aware of this requirement and that the incentives for using the system outweigh the challenges of changing passwords every 90 days.
   - Although users can access their archived data once they have a user account for the tool, that access also is not intuitive for users. The system should provide for a simple link to the records and include some basic output charts/graphs (e.g., harvests by month, harvests by gear type, harvests by catch region, sex ratio of catch over time, by-catch by location, etc.).
   - Collapsing reporting of harvest by day into one page with drop down lists for different species; and
   - Increasing online dynamic help options (e.g., include functions like hovering over a field name for help in understanding what information is being requested);

4.) Develop a set of consistent penalties for late and false reporting. Users report frustration with inconsistent VMRC policies regarding reporting. They recognize that VMRC often has to spend months with some users to get their reports or to fix errors in reporting. If consistent penalties were in place that were applied equally across all users, the quality and timeliness of reporting would likely increase. Similarly, users expressed concern over reporting no catch for long periods of time for fear of being penalized and having their license revoked. This leads to over-reporting among those users.
Acknowledgements
We greatly appreciate Virginia Sea Grant’s support of this project and in particular, Bob Fisher’s guidance and participation in the outreach workshops. We also want to acknowledge Stephanie Iverson from VMRC. Ms. Iverson manages VMRC’s online harvest reports and the project would not have been possible without her participation. She provided technical guidance, data, and allowed us to film her for the instructional video.

Electronic Attachments
Attachment B- Frequently Asked Questions (FAQ)
Attachment C- User Survey and Results
1. Sign up

First time users will have to request log-in information by contacting Stephanie Iverson at Stephanie.Iverson@mrc.virginia.gov or 757-247-2061. You can also request an account through the website by clicking the link indicated below. It will take 1-2 business days for you to receive your initial password.

2. Log in

Once you receive your password you can log-in by going to https://webapps.mrc.virginia.gov/harvest/ and entering your email address and the password you received.

Once logged in you can change your password by clicking “Change Password” button on the left hand side.

3. Report Vessel

You should add your vessel before starting your reporting. Click the “Review Vessels” button to bring you to your vessel log.
Then click the “Add Vessel” button in the far right column.

A new window will open. There you can enter the VMRC assigned vessel number of your boat(s). Once entered click the “Associate Vessel with Harvester>>” button. If entered correctly it will then confirm which vessels you have added, then you can close out of that window.
4. **Being Reporting**

   Return to the Main Menu and click the “Report Blue Crabs” button.

   After your first time on the site, this is where you will start each report.

   All of your data is entered on the right hand side of the page, beginning with the year, month, and day of harvest.

   If you are the harvester, select “NO” in the next line labeled “I USED AN AGENT.” If you are using an agent make sure to select “YES” from the drop down list and enter your agent’s VMRC ID in the next box. It is the license-holder’s responsibility to ensure harvest through an agent is reported accurately.
5. Enter Buyer’s information

The next line is for the buyer’s code. You can begin typing the name of the buyer and a list of matches will appear in a drop down list. You must click on the one you want and their corresponding code will be entered in the line for you. You can look up the proper spelling by clicking the “View Buyers” button on the left side of the page. A new window will open with an alphabetical list of all registered buyers.

By looking through the list of buyers you can find the proper name for out of state buyers (OUT OF STATE), buyers who do not require a license (RETAIL), and if you keep your crabs for personal use (PERSONAL USE).
6. Time and Gear
The next line is for hours fished, simply type in the number of hours your gear was in the water.

The next line is for gear amount. Enter the amount of gear (i.e., number of pots) harvested that day. Do NOT enter the amount of gear allowed by your license. For example, if you only fished 150 hard pots, but you have a 255 pot license, enter “150”.

The next line asks for the gear type. Click the drop down list and select the type of gear that was used to harvest your crabs. You can also look up the Gear name by clicking the “View Gears” button on the left side of the screen and searching through the complete list of gear types.

7. Water Body and Landing
The next two lines are entered in the same way. The Water Abbreviation line (top image) asks where you fish your gear, and the Landing line (bottom image) asks where you bring your catch ashore.

Start typing on each line and a list of matches will drop down. Click on the desired answer so the code will be entered in the line.
Alternatively, you can click the “View Waters” or “View Landings” button on the left side of the screen for a complete list of options.

8. Harvest Details
The next line asks for the species AND the specific type of Blue Crab (hard crab, peeler, etc.). You will have to submit a report for each species and type you harvested that day. Click the drop down list to select one of the options, or click the “View Species” button on the left side of the screen for an extensive list of species names. Be sure to look at all of the options for Blue Crabs to ensure you’re selecting the most accurate species.

*NOTE: You can also use this system to report harvest of other fish you harvest under Virginia license, like oysters and rockfish.
The next line asks for the unit you are reporting in. Click the drop down menu and select the unit you’re using.

BU = bushels
LBS = pounds
NU = number.

The following line asks for the amount; enter the amount you harvested in the unit you indicated in the previous line.

For example, if you harvested 15 bushels of hard crabs, you would click BU for bushels and enter 15 in the AMOUNT box.

9. Crew Details
The next line asks for the number of people in your crew. If you were harvesting without help the Crew Number would be 1. Type the number of harvesters with you on that day. In the next line enter how many hours you and your crew spent on the water.

The next 5 lines are for Helpers (meaning crew members with MRC-ID numbers). Be sure to include Helpers with MRC-ID numbers so they can receive credit for working that month.

10. Vessel Number
The last line asks for your vessel number. Click the drop down list to see
all of the vessels you entered in step 3. Select the vessel you used on that day.

11. Submit
Once you verify that the information you entered is accurate, you can submit your report by clicking the “Submit>>” button at the bottom right of the page.

That’s it! Your harvest is reported and you do not need to submit paper reports for this day’s harvest!
Online Harvest reporting Frequently Asked Questions

How do I get an account?
Contact Stephanie Iverson at VMRC at Stephanie.Iverson@mrc.virginia.gov or 757-247-2061

How do I get started?
Log-on to https://webapps.mrc.virginia.gov/harvest/ using your email address and temporary password issued by VMRC.

What if I forget my password?
The main web page has a link if you forgot your password. Click that link and a temporary password will be emailed to you almost immediately.

Why do I have to change my password every 90 days?
The Virginia Information Technologies Agency (VITA) established this requirement to protect the security of all state websites. VMRC does not have the ability to change this rule.

Is using this system to report my catch mandatory?
Reporting your harvest is mandatory, but using this system to do so is not.

Why should I report online?
Watermen who have the used the online reporting system say it is faster and easier to make daily online reporting a part of their fishing routine. They don’t forget their harvest if they report daily, and don’t have to remember their monthly paperwork. VMRC gets the information immediately, because there is no processing time. The sooner VMRC can get harvest data, the better able they are to make timely management decisions.

How far back in time do my online harvest records go?
Once you establish an account you can then access your entire harvest record back to 1993. No electronic trip level data is available prior to 1993 but any records submitted in paper or online since then is available online through your MRC ID number.

Can I access my harvest reports once they are submitted?
Yes. From the main page, you can select clickable buttons to review the records you have submitted using the online system (Review Records), or pull a report by species and date (Harvest History). You can print your information from the system as well.
**Do I have to report on days I don’t go crabbing?**

No. You only have to report harvest on days you crab. If you do not harvest for an entire month, there is a clickable button where you can check the months you did not harvest.

**When are electronic submissions due to VMRC?**

Your monthly reports are still due to VMRC by the 5th of each month. Users might find it easier to complete and submit entries daily, but daily submissions are not required.

**There’s a lot of information to fill out; what fields in the online report can be permanent?**

Once you have filled every field online and submitted a report, these same responses will be present when you go to submit another report except the amount of crabs caught. You will need to change any other fields that are different for that report, (e.g. number of pots fished, and water fished).

**Why are some fields red and some blue?**

The blue fields have clickable drop down menus from which you can choose. You must start typing in the red fields to get a list of potential responses. Then you must click on the correct option for the field to auto-fill. For example, in the BUYER field, start typing your buyer’s name, then click on the company’s ID number when you see your buyer. The field will NOT auto-fill if you do not click onto the number.

**Can I enter the buyer’s number if I know it?**

No, the online system will not accept numbers for buyers. You must type their name in but if you have sold to that buyer before, the name should be available for auto-fill.

**What if I sell to more than one dealer or in different quantities (bushels and dozens) in the same day?**

You would submit separate records for that same day, reflecting each dealer or quantity of crabs sold.

**What if I sell my own crabs to restaurants or the public, or want to keep some for myself?**

Under the BUYER field, type and select RETAIL (0395) for that quantity of crabs you sell, and PERSONAL (7777) for the amounts you keep for yourself.

**What happens is my buyer is not listed on the buyer pull down list or I sell to an out of state buyer?**

If you sell to an out of state buyer, you should use the ‘Out of State’ buyer = 9999, which is in the ‘buyer lookup’ table on their data entry screen.
Do I need multiple email addresses if I fill in reports for several family members or others?
VMRC is looking into consolidating accounts under one email account. They hope to add this capability before the end of 2013.

If I don’t work from a vessel, can I still create an account?
Yes, you would contact Stephanie Iverson and let her know that you are not using a vessel for all or part of your fishing activities. She will add “No Boat” to your account so that you can select that option within the harvest reporting system.

What if I submit a mistake in my report, like I select 255 scrapes instead of pots?
That will show up at VMRC as an audit error; you may get a call from VMRC to alert you to the error, but you will not be penalized. You have the ability to review your records for up to 30 days before the system will lock you out of the records to make corrections.

Should I report my total number of pots on my license or just the number of pots I fished that day?
Report only the pots fished that day. This is important so VMRC understands the amount of effort used to catch that day’s harvest. Otherwise, the catch per unit effort will be distorted.
1.

What is your age range?

Answered: 70  Skipped: 1

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<td>35 to 44</td>
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<tr>
<td>75 or older</td>
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Total 70
Would you recommend the online reporting system to other watermen?

Answered: 71  Skipped: 0

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<td>I would in the future</td>
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<tr>
<td>Maybe</td>
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<tr>
<td>Not at all likely</td>
<td>4.23%</td>
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<tr>
<td>Comments</td>
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</table>

Total: 71
Comments on Question 2:

I already have by the way my age is 16 so my age group was not listed.

11/25/2014 5:21 PM

Makes it fast and simple

11/24/2014 10:41 PM

It never worked for me, so I fill out the form and mail it in.

11/24/2014 1:48 PM

VERY difficult to use. I consider myself computer savvy and would prefer to do this electronically, but it is one of the worst- sites I have encountered. From the over-the-top password protection to the overall lack of functionality of the site

11/24/2014 12:39 PM

Yes, I like the online reporting system.

11/20/2014 9:14 PM

to much trouble. could be simplified.

11/14/2014 6:16 PM

I like the reporting fine, but the password side is over the top. It is the toughest password requirements of anything I do online. Who wants to falsely report my oyster harvest?

11/13/2014 7:15 AM

It is better than the old paper reports but still is to complicated.

11/12/2014 9:58 PM

to complicated with changing password

11/12/2014 8:16 PM

It's great

11/12/2014 3:24 PM
Needs to be a little simpler. Scale down the unnecessary information.

11/12/2014 2:38 PM

3.

Comments on Question 3:

I have not reported any activity yet but plan to fro my NOV 2014 report.

11/25/2014 11:30 AM
Now that we do not have to report daily there is no time saving online vs paper. Monthly reporting is just as fast either way.

11/25/2014 9:31 AM

my computer and online reporting do not go together

11/24/2014 1:48 PM

It would be more efficient if it was designed properly

11/24/2014 12:39 PM

I am new to the system, but from what I know about paper reporting, I would not prefer it over online reporting.

11/20/2014 9:14 PM

I never used the paper system so I cannot choose.

11/17/2014 5:54 PM

Basic internet skills is all that is required. Very easy, straight forward and helpful tool. Saves me time.

11/17/2014 9:20 AM

I save time on when I'm oystering but filling out the crab reports online is more time consuming than paper.

11/14/2014 6:16 PM

i save a lot of time with reporting oysters but not so much with summertime crabbing. You have to do a separate page for each individual species.

11/14/2014 6:43 AM

i have made several attempts to login and have been unsuccessful.

11/12/2014 9:16 PM

Dreaded doing the reporting when it was done by hand.

11/12/2014 3:24 PM
Comments on Question 4:

I have not reported any activity yet but plan to for my NOV 2014 report.

11/25/2014 11:30 AM

The system locks me out all the time if I miss a month

11/24/2014 10:44 PM
haven't tried it yet. it seems like it would take longer and filling out report forms is enough of a bother as it is.

11/16/2014 10:32 AM

I have been able to use it yet

11/14/2014 7:57 AM

I have not harvested yet Plus the crabbing was so bad I quit fishing for the year in July

11/13/2014 4:41 PM

Yes. The sentence should read, "I use only the online system to report my harvests"

11/12/2014 3:12 PM
5.

Comments on Question 5:

very quick responses from Stephanie

12/1/2014 9:23 AM

Stephanie Iverson has always been very helpful

11/24/2014 7:56 PM
Stephanie is quick to respond

11/24/2014 6:11 PM

Stephanie and everyone have been very helpful and cooperative

11/24/2014 12:39 PM

I have not really needed assistance. That's a pretty good sign.

11/20/2014 9:14 PM

Once you can talk with someone, the response is always good

11/14/2014 8:42 AM

I have had delays in getting email answers to my questions

11/13/2014 9:06 AM

6.

What changes would you recommend to improve the online harvest reporting system?

Answered: 48  Skipped: 23

Comments on Question 6:

Better definitions on each fillable field.

11/25/2014 5:21 PM

Easier password

11/25/2014 9:31 AM

Don't require frequent password changes Don't lock out accounts for inactivity

11/24/2014 10:44 PM

The code for buyers and gear amount can get confusing.

11/24/2014 10:41 PM

I hate having to change my password every 90 days!
11/24/2014 6:11 PM
So far so good! Only think that is a little time consuming is the password changing frequency.

11/24/2014 4:33 PM
Not require such a ridiculous password.

11/24/2014 3:59 PM
Not sure

11/24/2014 2:27 PM
Maybe look at changing how you have to enter the date of the month.

11/24/2014 2:18 PM
make it work

11/24/2014 1:48 PM
Maybe a monthly email alert reminding me to report at the end or the beginning of every month.

11/24/2014 1:35 PM
1) Change the obsessive password protection, 2) enable default fields, 3) make error messages more clear 4) send confirmation emails after entries,

11/24/2014 12:39 PM
none at this time

11/22/2014 7:14 PM
Not having to change pass word so often

11/21/2014 8:49 AM
See question #8

11/17/2014 6:47 PM
1. password should not have to be reset as frequent 2. Sometimes buyers are always not up to date.

11/17/2014 5:54 PM
Currently I haven't had a problem.

11/17/2014 9:20 AM
have all options for each class of crab caught all on one page - without having to hit submit for number of peelers caught, then how many jimmies, then how many sooks. etc.

11/16/2014 10:32 AM
None

11/15/2014 4:05 PM

It would be nice if the system reported what you reported last time. I sometimes get a little behind, and forget if I reported the previous month or not. Or at least let you know what you need to report at that time.

11/14/2014 11:19 AM

If you could add an extra drop down so you could do your sooks and jimmies on 1 page for a day instead of having to do 2 separate reports for 1 day would be a big help.

11/14/2014 10:35 AM

Some training will be necessary to educate some of your prospective users

11/14/2014 8:42 AM
None

11/14/2014 7:57 AM

having all species on one page.

11/14/2014 6:43 AM

not having to change the password so many times

11/14/2014 6:28 AM
none

11/14/2014 5:09 AM

there is no reason we should have to change our passwords so often. And the password requirements are crazy. This is not a bank account and there is no reason anyone would want to hack your harvest records. even my credit card and bank accounts don't require that you have to change your password so much. This at times has even made it impossible to send my reports in on time.

11/13/2014 2:46 PM

the passwords shouldn't be so complicated.

11/13/2014 12:30 PM

Hire a waterman who is computer literate to be the go to person for questions and education of non users.
Try make it easier

make pass word good until the user choose to change it, instead of every 90 days

Explanation of different fields, even the cheat sheet pop up is confusing, and I also have received letters of nothing reported when in fact i did report but the data base did not roll that over.

None

Let passwords stay the same and not so secure requirements for one.

The answers need to clearer for example if I harvest oysters in March then you have to assume they are spring oysters why ask that redundant question?

1. Easier access. 2. Simpler passwords. 3. Longer life for passwords. 4. Clearer definitions of various codes, i.e. Personal Use.

simplyfy

I do not have any sugestion

stop changing passwotds every 90 days

Less complicated password system
None at the time

Can't think of any changes at this time

The windows that show your selections needs to be bigger and expandable. This part needs to be upgraded.

None

Simpler. Scale down unnecessary info. Like hours fished and how many helpers.

I recommend being able to enter multiple types of species on same day with one entry. ie. No1, Jim, Sooks, Peelers

None
Comments on Question 7:

have not tried
12/1/2014 9:23 AM

Very impressed with the amount of data available.
11/25/2014 11:30 AM
There have been a few times that we have wanted to confirm harvest records and have not been able.

11/25/2014 9:31 AM

Haven't quite figured that out yet :)

11/24/2014 4:33 PM

Once I submit the report that's it. I cannot retrieve records once they have been submitted.

11/24/2014 1:35 PM

Seems OK

11/20/2014 9:14 PM

One click of a button. Very simple

11/17/2014 9:20 AM

Have not tried to download prior data

11/13/2014 9:06 AM

Never been able to retrieve my records.

11/12/2014 9:58 PM

Have not tried yet, N/A

11/12/2014 3:51 PM

I find it confusing

11/12/2014 3:12 PM
How user-friendly is the online harvest reporting system for you to use? Please use the comment box to suggest changes to the online system that would make it easier or more efficient for you to use and address how difficult or easy the online system is in comparison to the paper forms?

Answered: 67  Skipped: 4

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Comments on Question 8:
the look up tables. seems you have to have the exact wording for a match vs. suggesting similar spellings, etc. I have written then down in order to get them right.

12/1/2014 9:23 AM

I have browsed the data base and am very impressed with the amount historic data.

11/25/2014 11:30 AM

Easier, less complicated passwords. Streamline it so that you only see what is applicable to what you harvest.

11/25/2014 9:31 AM

Like I stated, the codes for the reports can be hard and confusing. You should be able to type "PER" for Perrin River, instead of 236 for example.

11/24/2014 10:41 PM

Fairly easy to navigate, the only trouble I've run into is the password difficulty because there have been long periods of inactivity. That requires phone calls and manual help on your end. Other than that, easy to use.

11/24/2014 4:33 PM

Some of the content is a bit confusion to understand.

11/24/2014 2:18 PM

kept throwing me back to do it all over and over, nothing was ever right

11/24/2014 1:48 PM

(Crabs) You should change the options so you can report all your catch for one day on one screen by adding more boxes for species and amounts. (Fish) I don't know where you got the species but they need to be looked at. I can't find some local species and this will cause me to submit a paper report. I started doing the reporting on line to save time, but if I have to submit paper reports too I not saving any time.

11/17/2014 6:47 PM

I like the idea of the previous information saving for the next entry.

11/17/2014 5:54 PM

Like I stated before, the most basic of internet skills is required. If you can read and click a button then you can use the Online Harvest Report

11/17/2014 9:20 AM

password changes are a bit troublesome
The drop down menus are good, but not very easy to use sometimes.

It needs to be changed so that everything you catch that day can be put on one page. Receiving individual species such as no.1, no.2, sooks, peelers, soft crabs takes a bit of time. It is really no faster than paper but i use it anyway because I hate writing.

to make it easier, I would suggest that when I log into to record the harvesting, that the form is pre-populated with my data, except for date of harvest, and the quantity. That is, everything else stays constant. For example: I always harvest in Lancaster always on Fleets Bay always use bottom cages same boat always retail The variables are the month, quantity and the season (Fall, Spring). The crew could change

Ask those waterman that use the system if they would be willing to help recruit others.

Why do I have to change my password every 90 days and with ones with stronger security than I have on my other password protected programs? I am not sure why you need to know how many workers I use to harvest when harvesting is just one day in a year of work.

For the most part once you view the training part its fairly easy. It took me several tries to get comfortable. Like I mentioned in an earlier comment, their needs to be some updating in the selection windows so that you can see the whole selection.

See #7. For reporting, fine.

I recommend being able to enter multiple types of species on same day with one entry. ie. No1, Jim, Sooks, Peeleers. Also if entry would allow bushels and pounds with one entry per day.
9.

**Comments on Question 9:**

I have not reported any activity yet but plan to for my NOV 2014 report.

11/25/2014 11:30 AM

My wife completes forms for me.

11/12/2014 3:54 PM
I use my work computer not at my residence. The only problem with this is if I'm on vacation and I don't go into work for a couple of days. I have been late reporting because of this. Once I go back in I catch it up.

11/12/2014 3:20 PM

Q10. What do you think would encourage additional harvesters to start using the online system? For example, do you think there should be incentives for reporting online or phase in required online reporting? (NOTE: VMRC has never advocated for the elimination of the traditional paper reporting forms.)

I can't believe some people prefer paper. Maybe it's a computer access/knowledge issue??

12/1/2014 9:23 AM

There should be an incentive, as use of the on line reporting system saves paper and money (postage and printing costs).

11/26/2014 10:55 AM

Incentives for reporting online.

11/25/2014 5:21 PM

Word of mouth will increase the use of the system.

11/25/2014 11:30 AM

Paper work should be still available. The older waterman are use to the paper work. There's no sense of fixing something that isn't broke. No sense of creating unnecessary confusion to mess up reports.

11/24/2014 10:41 PM

To me its a no-brainer. Its quick and easy. Maybe an incentive would help people see

11/24/2014 7:56 PM

Long term, it's much more efficient.

11/24/2014 4:33 PM

Older people are known to stick to their ways (paper and pen). As the years pass, and younger waterman take the older generation's place, more and more will use online tools.
Not sure about this, some of the old guys don't use computers.

Vmrc should advocate

Online is faster and more efficient. Yes an incentive might help.

Incentives may not be as effective as making it a requirement.

Complete re-design

I really don't see how anyone would prefer paper vs online reporting.

Time will do it, as people become more proficient with computers

Some people are not good with computers

I guess the old-school paper reporting folks should be offered online or telephonic assistance. Sure seems to me that it would save them time.

Advertise more to waterman. When I started about a year ago I had to ask if it was available. I asked about 5 years ago and they told me they were working on it.

I understand it would be difficult for some of the "old timers" and I respect that, but maybe a questionnaire sent out to all that provide harvest information now would be an
option to get feedback from them concerning other people in the family that could help. Many have children and/or spouses that are computer savvy and can support. At the least a phase in period would be best. Not all have access to computers. I think the questionnaire could include this...find out how many at least have the option today.

11/17/2014 5:54 PM

Very simple solution to get more watermen involved with online reporting. GIVE ANYONE WHO IS ACTIVELY USING AND REPORTING THEIR CATCH ONLINE 100-500LBS OF ROCKFISH TAGS. They should not be transferable and only good year by year on a case by case basis. You would see every waterman using the online harvest report and VMRC would be able to get valuable harvest information quick and efficient.

11/17/2014 9:20 AM

just make the online forms easier to use for the crabbers. aim to make the online form look exactly like the paper reports. id use it then

11/16/2014 10:32 AM

It would be very difficult to require online reporting when all people do not have access to an Internet connection.

11/15/2014 4:05 PM

it is not easy to find the site to start the process of reporting online.

11/15/2014 2:10 PM

There are probably some out there that are still not "online", no computers in the home, or no internet service available. Also the older generation is just not interested in learning how to use a computer or electronic filing. So, a long phase in may be needed with exemptions for online filing for some. Although, I think if they CAN try it for a couple of months they will be pleased with the reporting system. I wish NC had the same or similar reporting system available.

11/15/2014 7:39 AM

For one, the password requirements are really tight. It would be nice if having to change your password every 90 days was an option. In todays world .... everything has a password ... and it getting to be a nightmare to remember all your passwords, especially if you HAVE TO change them every 90 days.

11/14/2014 11:19 AM
I am not sure some people are just stuck in their way but some sort of incentive might help some of them to unleash try it anyway.

11/14/2014 10:35 AM

Some type of reward to sign up would be helpful, even if was just a McDonald gift certificate.

11/14/2014 8:42 AM

Not to make it so hard to sign up.

11/14/2014 7:57 AM

don't know

11/14/2014 6:43 AM

I don't know WHY anyone would prefer paper over online. I've done the paper process its the most out dated and archaic process. I would force them to use the online tool. The person doing their QuickBooks or accounting input could very easily do the online reporting.

11/14/2014 5:09 AM

yes

11/13/2014 4:41 PM

get rid of the passwords

11/13/2014 2:46 PM

Reduce the cost of waterman's renewal fee if you use online report/allow u to renew online also.

11/13/2014 1:56 PM

incentives always help. But don't forget about the people already using it.

11/13/2014 12:30 PM

C item 8

11/13/2014 9:06 AM
Make it alot easier to use

11/13/2014 8:20 AM

give some type of incentive to use on-line reporting

11/13/2014 8:08 AM

Not sure, most are old timers who hate technology, I have tried but I have no issues with
it, Its what my degree is in and its what I do for the county I work for but most don't even
have internet and consider a computer the DEVIL! haha

11/13/2014 7:58 AM

Demos, videos etc showing how easy system is to use

11/13/2014 7:56 AM

I would phase it in as a requirement. A lot of older watermen are not tech friendly, but
with smartphones and such in time everyone should be able to online report.

11/13/2014 7:15 AM

If reporting could be combined with shellfish sanitation reporting and have one report do
for all

11/12/2014 9:58 PM

Just simplify the entire process. Users are watermen and oyster gardeners, not necessarily
computer pros.

11/12/2014 9:21 PM

incentives and keep password as long as user wants

11/12/2014 8:16 PM

you might think about having meetings in different places and do a live presentation.

11/12/2014 5:48 PM

I DON'T KNOW OF ANY CHANGES I WOULD SUGGEST. PAPER REPORTING IS
THE ONLY WAY SOME WATERMAN HAVE OF REPORTING

11/12/2014 4:48 PM
Incentives may help. Anyone who has a computer in their home should be required to try online; they will see how much easier and faster it is.

11/12/2014 3:54 PM

Tell them if they use online system, they will help VMRC be more efficient.

11/12/2014 3:51 PM

Not sure

11/12/2014 3:24 PM

I think the new generation will all be doing online; it just takes time.

11/12/2014 3:23 PM

I'm new to commercial fishing and I plan to go forward full time in several years. I believe an incentive always helps or could. Computers are intimidating to some people and with most of the waterman I've met they would be reluctant to switch. With that said, create an incentive. Rock tags would be great, hint hint.

11/12/2014 3:20 PM

Yes incentives would work.

11/12/2014 2:38 PM

Incentives would certainly help!

11/12/2014 2:37 PM

Incentives may help. It is felt that most of the resistance to the program is due to not knowing how simple and quick it is to use it.

11/12/2014 2:09 PM
Appendix B

Faster, Easier Reporting of YOUR Blue Crab Harvest!

Imagine having to deal with less paperwork! If you could spend less than 5 minutes each day reporting your crab harvest from Virginia waters, would you do it to avoid monthly paper reports? Electronic harvest reporting means no paperwork recording and submitting, and easy access to your harvest information from previous years. Best of all, it is free to access and available now! Read on to learn about how you can get involved!

Why Electronic Harvest Reporting?

VMRC developed a web-based harvest reporting system in 2009 for commercial watermen to make reporting harvest easier for all commercial fisheries in Virginia. However, very few commercial watermen know about the system or are registered to use it.

Online is EASY. If you have access to a computer or mobile device with Internet access, you can report your harvest online. Electronic reporting is the most efficient way to collect harvest data: it reduces errors and more importantly, it reduces time between harvest reporting and management decision-making. Under the current paper process, watermen report daily catch on a monthly basis on paper reports. That information must then be hand-entered into the VMRC database, which can take up to three months or more to process!

By submitting your daily harvest online, VMRC gets your harvest information immediately because there is no processing time. The sooner VMRC can get crab harvest data, the better able they are to make timely management decisions such as extending or closing seasons, increasing quotas, or changing bushel limits.

Online reporting is also easier for your own record-keeping. Virginia watermen using the system suggest it is more accurate to report daily, than to have to remember a week or month of harvest. Once you are registered to use the online system, you also have access to all your harvest information in one place, no matter how many species you harvest!

Join the Effort to Improve Blue Crab Harvest Accuracy!

Getting started is EASY! The online system at: https://webapps.mrc.virginia.gov/harvest.

First time users must request log-in information from VMRC before getting started by contacting Stephanie Iverson at Stephanie.Iverson@mrc.virginia.gov or 757-247-2061. Getting your initial password takes 1-2 working days.

The Virginia Watermen’s Association and the Virginia Blue Crab Industry Panel are also working with Virginia Sea Grant to increase use of electronic harvest reporting for blue crabs by holding workshops across the state to train watermen to use the online system and answer questions. Watermen who use the online reporting system will also get the chance to review the make recommendations to improve the online system.

So, log-in to help save yourself time AND help improve crab harvest reliability! And stay tuned for more information about workshops.