Big Game Harvest Reporting – A Model for Fish?

CarolAnne Feehan

North Carolina Wildlife Resources Commission
IT Business Analyst

My Background

- IT Analyst for 4 years with NCWRC

- Program / Project Manager for a team that builds, maintains or supports 132 non-licensing applications for Fish, Wildlife, Enforcement, Engineering, Education, & Enterprise use

- Over 25 years of experience in IT – Private industry, Management Consulting & Government

- Used my first computer over 40 years ago (yikes!!)

NORTH CAROLINA Wildlife RESOURCES COMMISSION

Topic

- When a Big Game animal is harvested, Hunters are required to report the kill. This data feeds into statistical reports that monitor the population.

- Many years ago, reporting required manned check stations. This is now (mainly) a self-service reporting function.

- If Harvest Reporting is being considered for Fish, what are some 'lessons learned' that Wildlife can share?

Definition - Big Game in NC

Quiz:

What are the Big Game species in NC?

Definition - Big Game in NC

Deer

Turkey

Bear

Feral Swine

NORTH CAROLINA Wildlife RESOURCES COMMISSION

Business Use Case

- Hunters are issued a paper Big Game Harvest Report Card with a set of tags that correspond to the number of Deer, Turkey and Bear that can be taken.

- When an animal is taken, the Big Game Harvest Report Card is immediately validated by punching the crosshair symbol on the tag.

- Within 24 hours, the kill is reported. An Authorization # is generated. The Hunter writes the Authorization # on the Big Game Harvest Report Card.

Big Game Harvest Report Card

This report card is valid for the 2017-18 hunting season. Refer to your license before hunting to ensure your license(s) is valid.

**WRC Customer # 012345610**

Big Game Harvest Report Card

- Punch or cut the appropriate crosshair symbol **before moving the animal from the site of kill.**
- All harvests must be reported within 24 hours. Harvest must be reported BEFORE the animal is skinned or dismembered for consumption.
- Each harvest must be reported either by phone at 800-446-8663 or online at ncwildlife.org.
- Record authorization number on the line beside the appropriate crosshair symbol.
- If the animal is left unattended before reporting, it must be identified with your name, WRC customer number, and date of kill.
- Antlerless is defined as does and button bucks.

Harvest ID # 012345610	Harvest ID # 012345614
Antlered or Antlerless Deer - Statewide	Antlerless Deer - Statewide
Harvest ID # 012345611	**Harvest ID # 012345615**
Antlered or Antlerless Deer - Statewide	Antlerless Deer - Statewide
Harvest ID # 012345612	**Harvest ID # 012345640**
Antlerless Deer - Statewide / Also valid for antlered deer in Eastern Season	Wild Turkey - Male or Bearded Only

Harvest ID # 012345620

Bear - Non-Resident Hunters see Digest for special licensing requirements

Harvest ID # 012345613

Antlerless Deer - Statewide
Also valid for antlered deer in Eastern Season

Harvest ID # 012345641

Wild Turkey - Male or Bearded Only

Current Reporting Methods

1. Interactive Voice Response (IVR) – touch-tone reporting by Phone
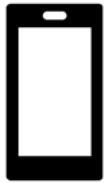
2. Online, responsive web application – for mobile, table or desktop reporting through a browser

3. Wildlife Service Agent, who reports on behalf of the Hunter using #1 or #2 above.

NORTH CAROLINA
Wildlife
RESOURCES COMMISSION

Reporting Methods

Big Game Harvest Reporting Source Usage
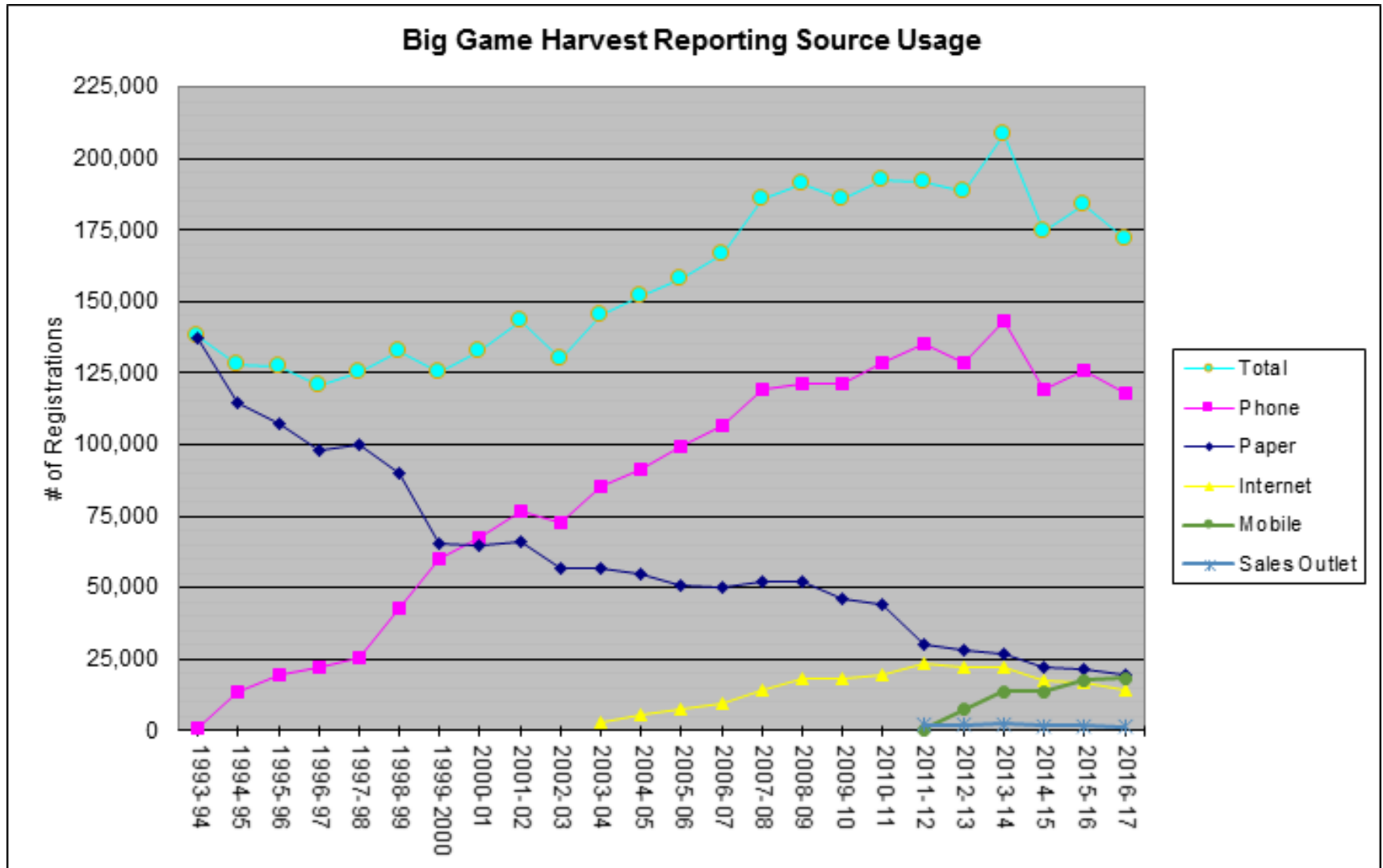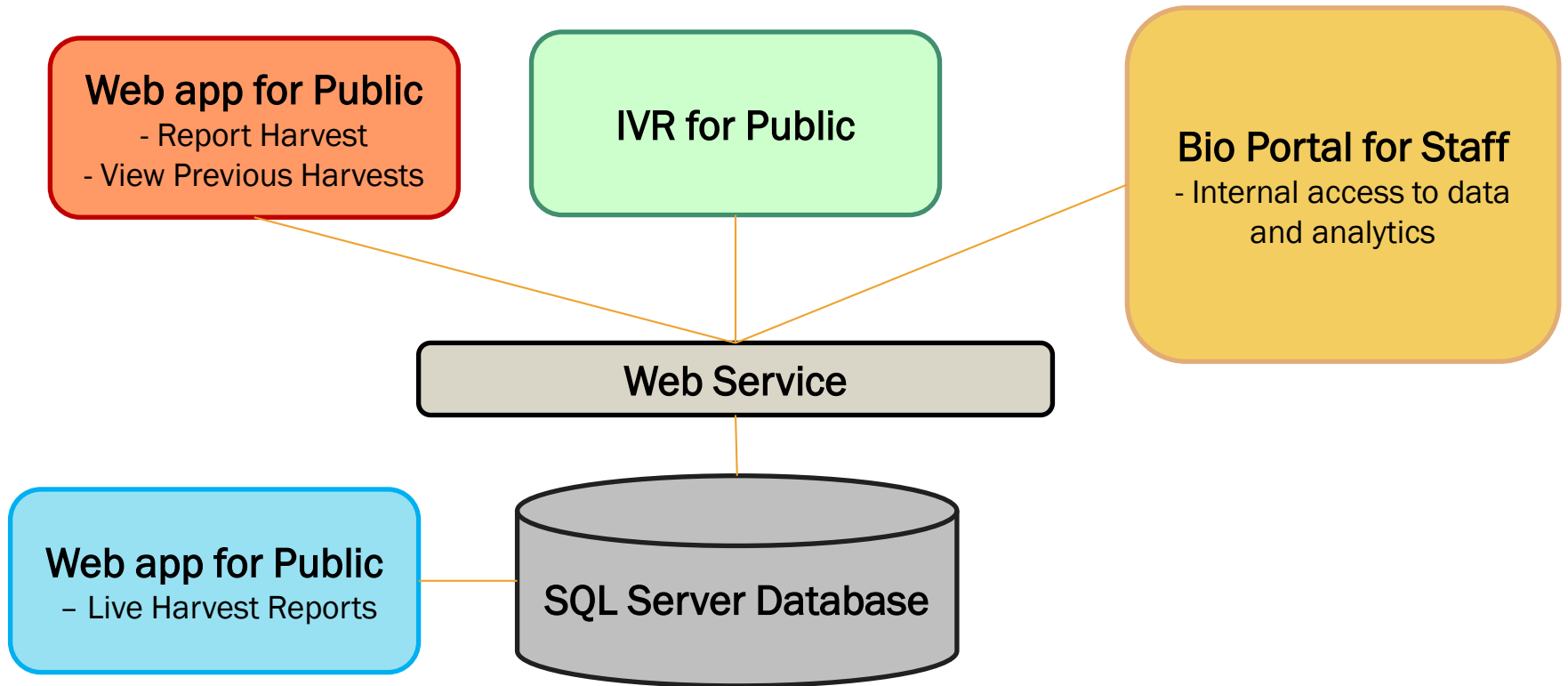
System Components

System Components

- **IVR** for Public reports – Vendor product, Genesys

- **Web application** for Public reporting / viewing past harvests – built in-house

- **Web application** for Public for seeing Live Harvest statistics – built in-house

- SQL Server **Database**

- **Web Service** (connects components to the Database) – built in-house

- Internal **application for staff for data and analysis** – built in-house

Big Game Harvest Reporting

Report a Big Game Harvest

You can also call 800-I-GOT-ONE (800-446-8663) to report your harvest.

If you do not have your Big Game Harvest Report Card or Harvest ID Numbers, call 888-248-6834 M-F, 8 a.m. - 5 p.m., or **email us.**

View My Past Harvests

Review a list of your previous harvests with authorization numbers. You can also print a personalized harvest certificate for display.

See Live Harvest Reports

View live county, regional or statewide harvest totals and trends for deer, bear or turkey.

Big Game Harvest Reporting

Report a Big Game Harvest

You can also call 800-I-GOT-ONE (800-446-8663) to report your harvest.

If you do not have your Big Game Harvest Report Card or Harvest ID Numbers, call 888-248-6834 M-F, 8 a.m. - 5 p.m., or **email us.**

Report Harvest

Credentials

North Carolina Wildlife Resources Commission

Big Game Home Page

Big Game Harvest - Login

WRC Customer Number

[   ]   _I don't know my number_

Last Name

[   ]
Please enter without suffixes (such as Jr. or III).

◉ Report a Harvest
◯ View My Past Harvests

Submit

You can call 1-800-I-GOT-ONE (1-800-446-8663) to report your harvest if you are experiencing problems with the online system.

If you do not have your Big Game Harvest Report Card or need your Big Game Harvest ID Numbers, call 1-888-248-6834, M-F, 8 a.m. - 5 p.m.

For questions or issues:
biggameregistration@ncwildlife.org.

Report Harvest

Details

Big Game - Report a Harvest
[View My Past Harvests](#)

RYAN T MYERS

Please refer to your [Regulations Digest](#) for valid season dates for each region.

Harvest ID # or DMAP Tag

| 191493815 ▼ |

9-digit # above authorization line on tag
Missing a Harvest ID Number?

Antlerless Deer – Statewide

County

| Johnston ▼ |

Game Land

| No ▼ |

Animal

| BUTTON BUCK ▼ |

Weapon

| Bow & Arrow ▼ |

Harvested Today

| Yes ▼ |

[Report Harvest]

Report Harvest

Confirm

✓

Big Game - Report a Harvest

View My Past Harvests

RYAN T MYERS

Thank you for entering your kill online. Authorization Number: **2638537**

Enter this number on your Big Game Report Card.

Report Another Harvest

You can call 1-800-I-GOT-ONE (1-800-446-8663) to report your harvest if you are experiencing problems with the online system.

If you do not have your Big Game Harvest Report Card or need your Big Game Harvest ID Numbers, call 1-888-248-6834, M-F, 8 a.m. - 5 p.m.

For questions or issues:
biggameregistration@ncwildlife.org.

Big Game Harvest Reporting

View My Past Harvests

Review a list of your previous harvests with authorization numbers. You can also print a personalized harvest certificate for display.

View My Past Harvests

Log Review

North Carolina Wildlife Resources Commission

Big Game Home Page   Log out

Big Game - View My Past Harvests
Report a Harvest

RYAN T MYERS

Listed below are your reported big game harvests since the fall of **2001**.

The highlight shows the portion of the authorization number that should be recorded on your Big Game Report Card. Age values are currently only available for Bear.

Auth. Number: 2638529

Report Date: 10/16/2017 10:16:00 AM

County: Brunswick

Animal: Deer

Type: DOE

Weapon: Bow & Arrow

Location: Juniper Creek

Dogs: No

Age:

Certificate: Print

Auth. Number: 2638532

View My Past Harvests

Certificate

NORTH CAROLINA WILDLIFE RESOURCES COMMISSION

Big Game Harvest Record

Congratulations on your big game harvest! And thank you for helping conserve our hunting heritage in North Carolina.

RYAN T MYERS

Bow & Arrow	**1914938**
Type (Archery/Black Powder/Gun)	WRC Number
Monday, October 16, 2017	**2638529**
Date	Authorization Number
Brunswick	**Yes**
County	Game Lands (Yes or No)

Hunt Details:
A great trip with Bob and Roger!

Gordon Myers, Executive Director

David Cobb, Ph.D., Chief of Wildlife Management

Big Game Harvest Reporting

See Live Harvest Reports

View live county, regional or statewide harvest totals and trends for deer, bear or turkey.

Live Harvest Reports

Query

Live Deer, Turkey & Bear Reported Totals

This page will generate real-time reported big game harvest counts for the current hunting season from the North Carolina Wildlife Resource electronic reporting system. Harvest counts are updated daily.

Please note that current season counts are subject to change until harvest records are finalized by the NCWRC after the end of the hunting season.

Select from the following options to generate your report:

Species:

Deer ▼

Show Totals by:

○ **State**

◉ **Region**

Deer Season - All Regions ▼

○ **County**

-- Select one or more -- ▼

☐ **Include past 3-year comparisons**

Generate Report		Clear

Live Harvest Reports

Results

Generate Report   Clear

As of Wednesday, November 15, 2017:

Area: DEER SEASON - CENTRAL

Total Deer -
Current: 16,286

Antlered Bucks -
Current: 9,118

Button Bucks -
Current: 746

Does -
Current: 6,422

Antlered Bucks /
Sq. Miles - Current: 1.35

Area: DEER SEASON - EASTERN

Total Deer -
Current: 39,938

Antlered Bucks -
Current: 24,854

Button Bucks -
Current: 1,841

Does -
Current: 13,243

Antlered Bucks /
Sq. Miles - Current: 1.18

Area: DEER SEASON -

Analysis and Reporting for Staff

Compliance Rates

To calculate compliance rates, we compare data collected through Harvest Reporting with other annual surveys. *Without the additional surveys to cross-reference, we would have no way to estimate compliance*.

BEAR

- Estimated at 80-85% compliance.

- This is a 'prestige' species that Hunters want to see recorded.

DEER AND TURKEY

- Both estimated at 70-75% compliance

Core Lessons Learned

1. Define a very clear business process FIRST. Plan for how systems and people should behave when something goes wrong.

2. Study the Typical User in their environment and create a profile BEFORE designing the system. Is internet service available? Is it wet outside? Are the surroundings loud? Are they older and depend on reading glasses? Are their fingers cold (making fine touches on a screen difficult)?

3. Keep Customer Service and Enforcement teams in the loop. Demo often so that they fully understand the process and the applications involved so that they can support users.

4. Beyond just building / installing the systems, plan maintenance time for software and hardware, especially if you build it yourself. If you use Microsoft Office 365 products, be aware that new updates sometimes come down from the cloud UNANNOUNCED.

Core Lessons Learned, cont.

5. Annual setup takes time. Rules and Regs change, and this drives configuration changes. Plan annual maintenance time for both Business and IT staff.

As an example, our typical schedule:

Month	Task
May	Season kick-off meeting. Discusses regulatory changes, new enhancements, high priority defects
July	Business team provides spreadsheet with configuration for the year. This includes all the business rules that system is constrained by. Database team imports. (sometimes this takes multiple cycles)
August	All code updates are finished and pass technical testing (QA). Code moves into User Acceptance Testing. Business Team tests and approves.
August	New voice files for IVR are recorded and tested.
September	Code pushed live. IVR flipped on. Season launches.
September – April	On-going data cleaning, minor troubleshooting
April	IVR flipped off. Analysis and final reporting

Thank You & Questions