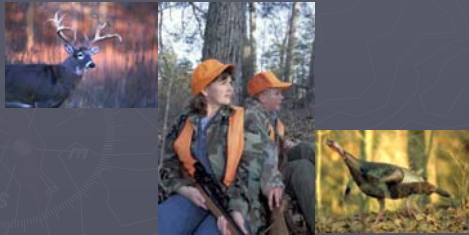


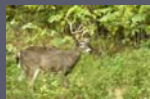
# Deer and Turkey Telecheck

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## Introduction

- ▶ Missouri Department of Conservation
  - Manage the State of Missouri's Forest, Fish, and Wildlife Resources
- ▶ Deer and Turkey Telecheck
  - Animal Harvest Check-In Using Internet and Automated Voice Recognition System Developed by Verizon Business (Formerly MCI)



## Background

- ▶ Deer and Turkey Harvest Information is Used to Effectively Manage Populations
  - Population Age and Density
  - Determine Seasons and Limits
- ▶ All Deer and Turkey Hunters are Required to Report (Check) Animals Harvested by 10:00 p.m. that Day



## The Way It Was

- ▶ Manual Check Stations
  - Hunters Tag Animal In Field
  - Drag Animal To Vehicle
  - Drive to Check Station
  - Attendant Records Information
  - Agent Collects Paper Check Sheets
  - Paper Check Sheets Scanned In
- ▶ Issues
  - Expensive To Operate
    - ▶ People Intensive
    - ▶ Payments To Check Station Vendors
  - Scanning Problems
    - ▶ Soiled/Torn Check Sheets
    - Manual Entry Required
  - Data Analysis Delayed



## Vision of What It Could Be

- ▶ Automated Check-In System
  - Hunter Tags Animal In Field
  - Reports Harvest Through Automated System
  - Receives Confirmation To Indicate Legal Harvest
- ▶ Benefits
  - Eliminates Check Stations
    - ▶ Frees Agents to Look For Violators
    - ▶ Saves Hunters Time
  - Real Time Data Reporting and Analysis

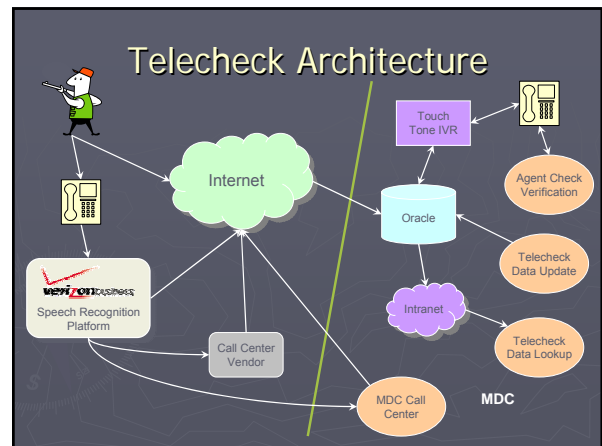
## Challenges

- ▶ Multiple Overlapping Seasons
- ▶ Firearms Deer Opening Day
  - Numerous Calls In Short Amount Of Time
- ▶ Statewide Access Needed
  - Cell Phone Coverage Spotty In Rural Areas
- ▶ Breaking the Check Station Tradition
  - Social Aspect – Comparing Deer
- ▶ Getting Adequate Data



## The Telecheck Solution

- ▶ Automated Voice Recognition System
  - 800 Number To Access System
  - Voice Prompts To Collect Data
  - Confirmation Number Generated And Returned
  - Check Record Posted to Database
- ▶ Web Check Interface
  - Alternate Source To Check Animal

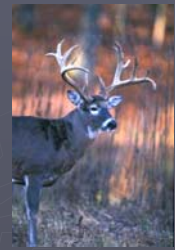


## Technology

- ▶ Voice Response System – Verizon Business
  - Developed and Hosted By Verizon Business
  - Web And Voice Portal Services
  - Public Switched Telephone Network
- ▶ Web Site – MO Department Of Conservation
  - Load Balanced Dell Servers Running IIS
    - ▶ Internet Server(s) And Web Services Server(s)
  - Telecheck Pages For Verizon Posting Only
    - ▶ No Functional User Interface
  - Public Web Check Pages
- ▶ Database – MO Department Of Conservation
  - Oracle

## Information To Gather

- ▶ Type Of Animal Harvested
  - Deer
    - ▶ Antlered Buck, Button Buck, Doe
  - Turkey
    - ▶ Adult Gobbler Or Hen,
    - ▶ Juvenile Gobbler Or Hen
- ▶ Biological Data
  - Deer – Number Of Antler Points
  - Turkey – Spur And Beard Length
- ▶ County Where Animal Harvested



## Information Returned

- ▶ Confirmation Number
  - Required To Complete Legal Harvest
    - ▶ Written on Permit And Attached To Animal
  - Smart Coded To Aid Protection Agents
    - ▶ TMDHSSSS
      - T = Type Of Animal
        - ▶ Number For Phone
        - ▶ Letter For Web
      - M = Month
      - D = Date
      - H = Hour
      - SSSS = Unique Sequence Number

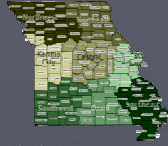


## Input Challenges

- ▶ Multiple Acceptable Names For Same Option
  - Antlered Buck / Antlered / Buck / 8 Point Buck
  - Adult Gobbler / Gobbler
  - Adult Hen / Hen / Bearded Hen / Bearded
  - Juvenile Gobbler / Jake
- ▶ Requesting Biological Data Concisely
  - Antler Points, Spur and Beard Lengths
  - Word Prompt To Get Meaningful Yes/No Answers
- ▶ County Names

## County Names

- ▶ Multiple Pronunciations
  - Schuyler – Skyler, Schooler, Shuler
  - Chariton – Sheriton, Chairton, Sharton
  - Howard – Howard, Hard
- ▶ Similar Sounds Misinterpreted
  - Wright – If Pronounced Rat – Interpreted Platte
  - Maries, Marion, Daviess
  - Perry vs. Barry
    - ▶ Different Sides Of The State
    - ▶ Different Hunting Regulations
  - Remove From List When Not Right



## Supplemental Development

- ▶ Telecheck Data Lookup
  - Real Time Harvest Reports
    - ▶ Season/County Totals
  - Protection Agent Support
    - ▶ Checking After Hours
    - ▶ Short Interval Check
    - ▶ Illegal Harvest
      - Antler Point Restrictions
      - Doe Only Counties
      - Invalid Permit
- ▶ Touch Tone IVR Agent Verification
  - Enter Telecheck ID – Retrieve Confirmation



## 2005 Results

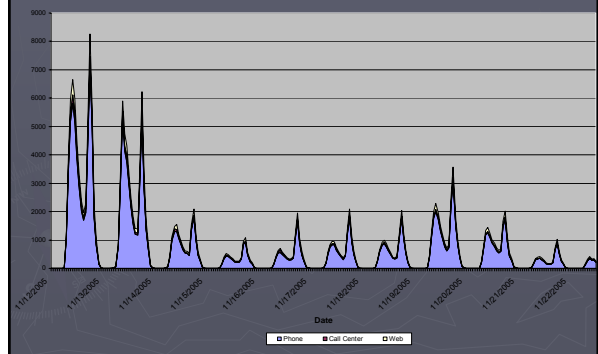
- ▶ Call Volumes
  - 52,440 Calls Completed Opening Day (Deer)
    - ▶ 7,043 Calls Completed In Peak Hour
  - 263,211 Total Calls Completed In Fall Season
- ▶ Call Analysis

Total Calls	Completed	Abandon	Incomplete	Call Center
303,589	263,211	23,598	16,780	10,559
	86.7%	7.8%	5.5%	3.5%

- ▶ Telecheck vs. Web Check
  - 43,502 Completed Web Checks – 14.2% of Completed Checks
- ▶ 39% Increase In Arrests For Tagging/Permit Violations



## Firearms Deer Check Volumes



## Future Expansion

- ▶ Targeted Data Collection
  - Pulaski County – Fort Leonard Wood
- ▶ Promote Conservation Programs
  - Share The Harvest
  - Special Hunts
- ▶ Hunter Survey Opportunities



## Questions?



