

A Non-Traditional Veterinary Career: My Experience as a USDA Veterinarian



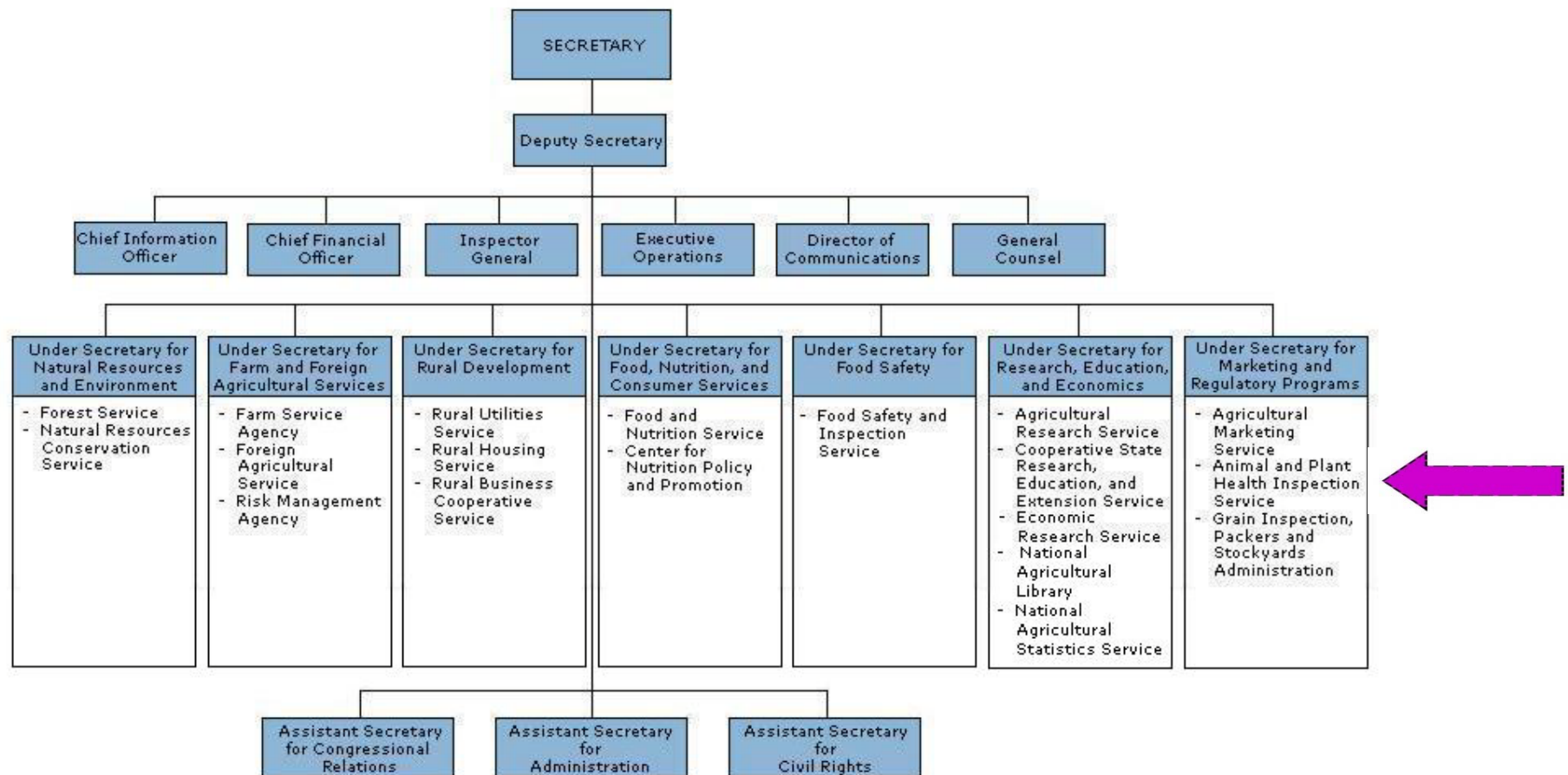
Kathleen Ritzmann
November 17, 2008

United States Department of Agriculture

- “Protecting American Agriculture”
- Responsible for regulating the safety and development of food, agriculture, and natural resources
- Established in 1862
- Cabinet status in 1889
- Current Secretary of Agriculture: Ed Schafer



The Federal Organization – United States Department of Agriculture

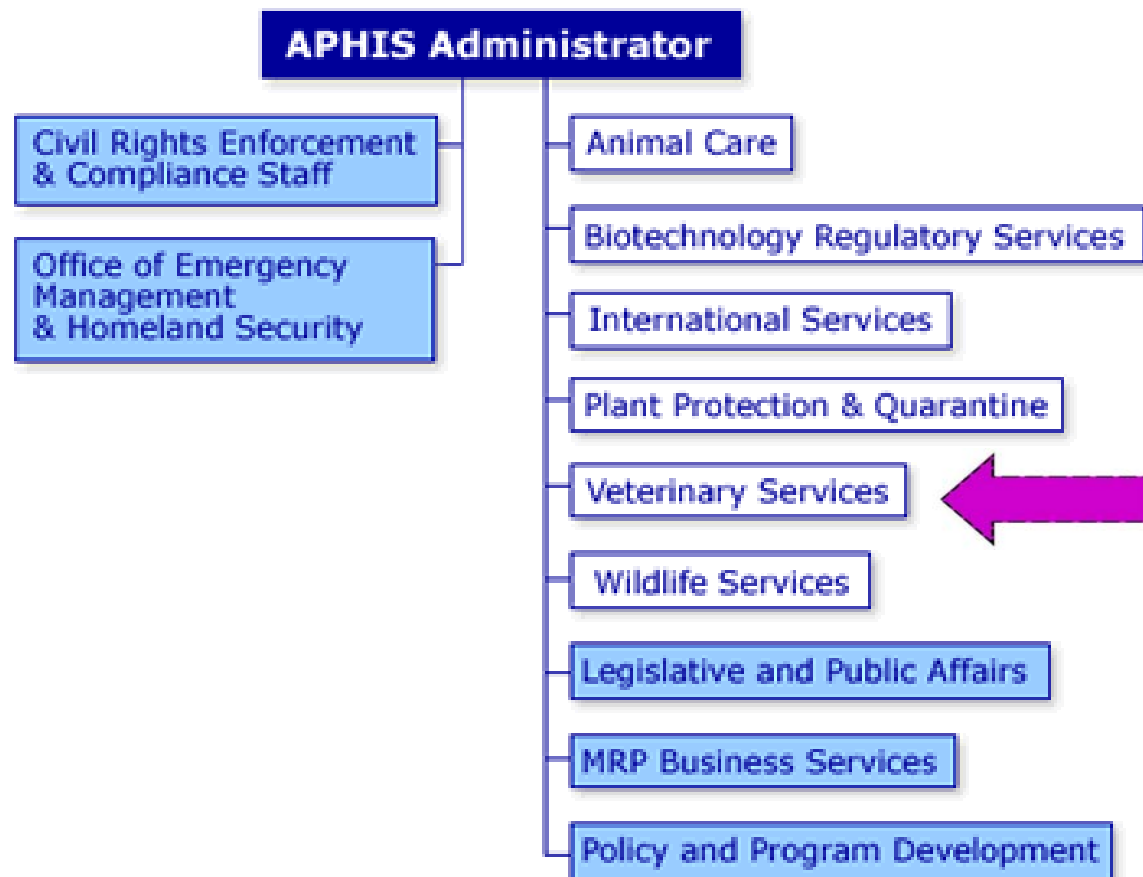


Animal and Plant Health Inspection Service

- Mission: “To protect the health and value of American agriculture and natural resources”
- Targets the health and care of animals and plants
 - Prevent and protect against foreign pests and diseases
 - Manages current pest and diseases within the U.S.
 - Eradicate diseases where possible
- Improves agricultural productivity and competitiveness
 - Develops and advances science-based standards with trading partners
 - Protect against unjustified restrictions
 - Works closely with OIE
- Protects public health
 - Prevent potential zoonotic disease
 - Protection of those that respond to diseases



The Federal Organization – Animal and Plant Health Inspection Service

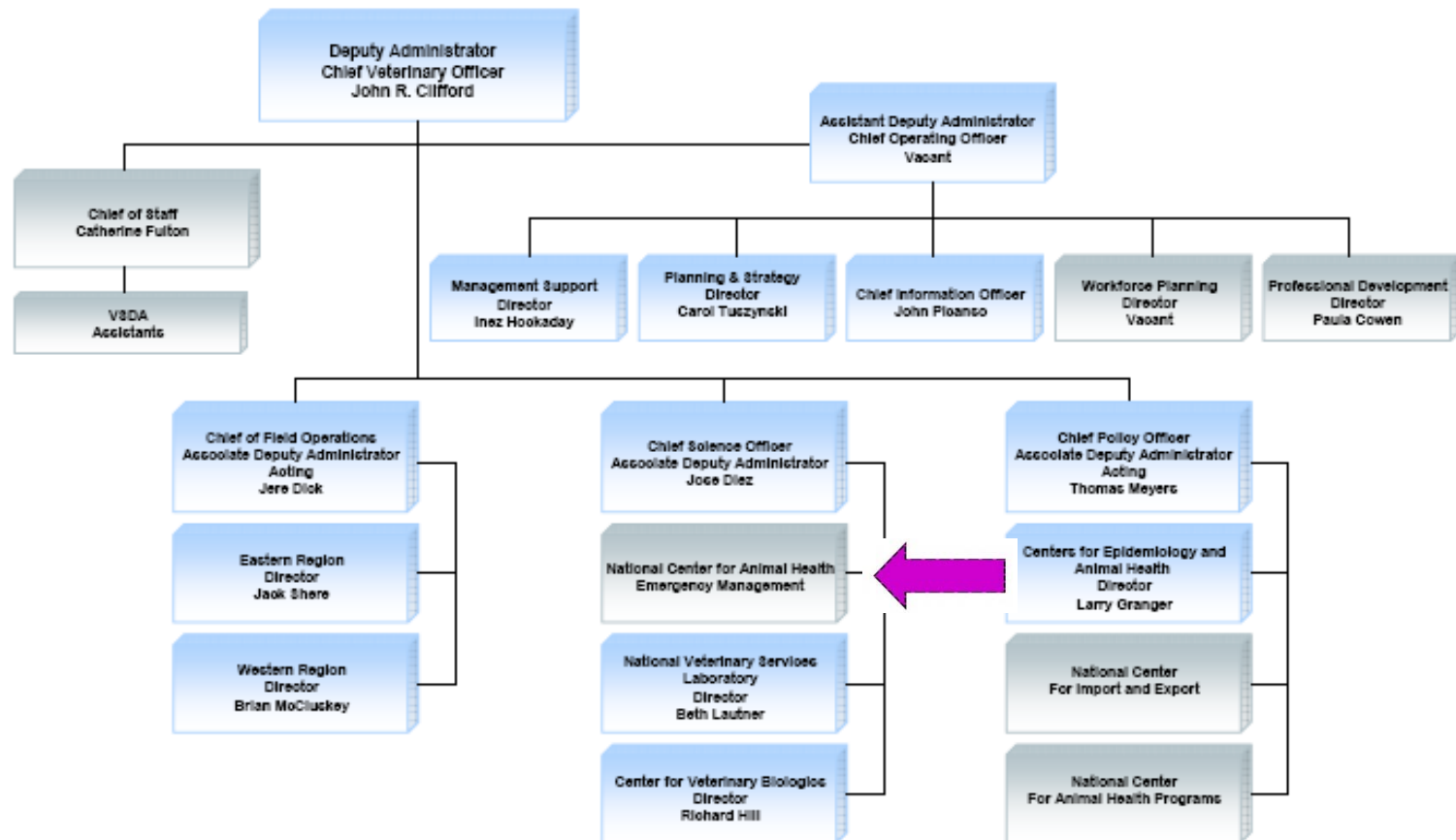


Veterinary Services

- Domestic animal side of APHIS
- Protects and improves the health, quality, and marketability of animal and animal products
- Works at preventing, controlling and/or eliminating animal diseases
- Monitor and promote animal health and productivity.



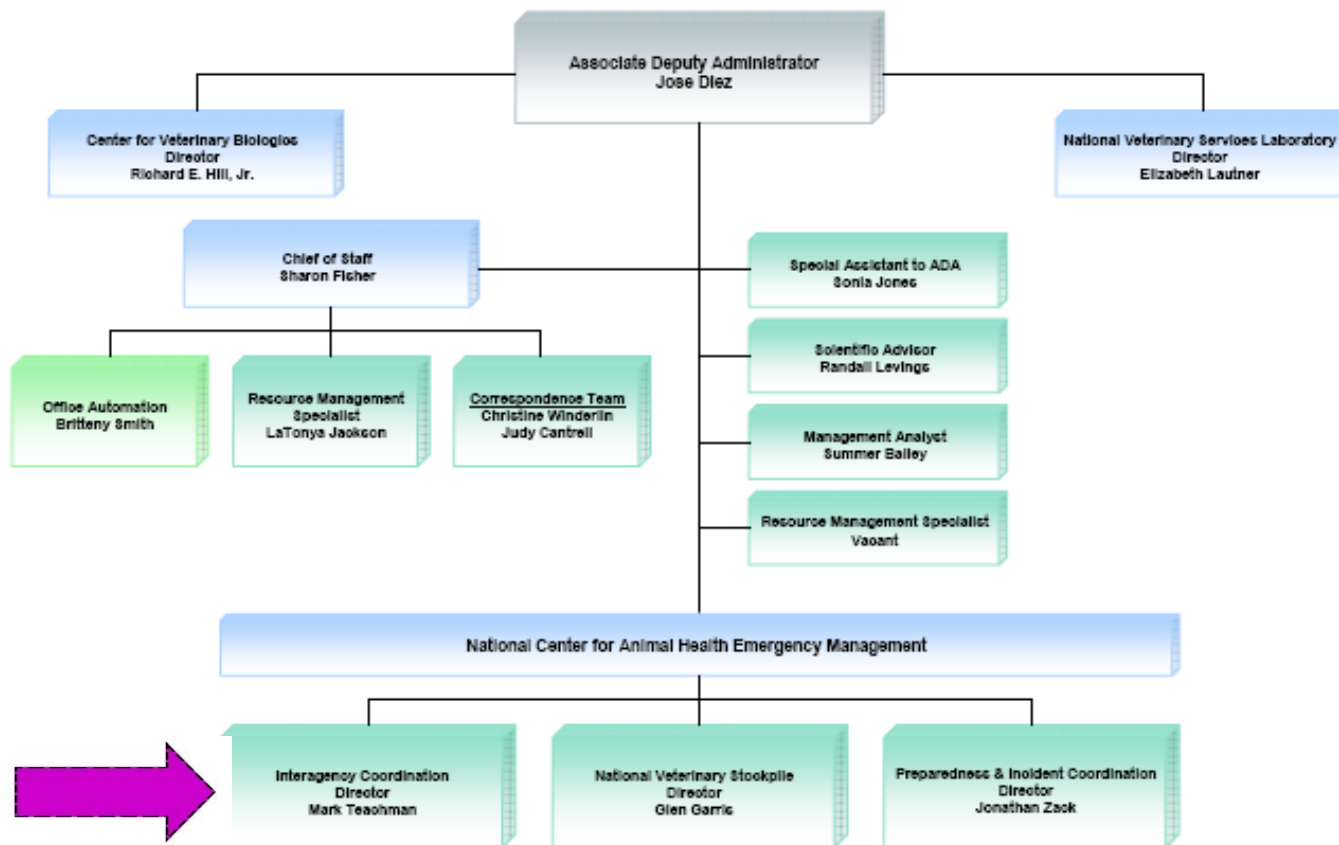
The Federal Organization – Veterinary Services



National Center Animal Health Emergency Management

- Develop strategies and policies for effective incident management
- Coordinate incident responses
- Liaison with other emergency management groups
- Ensure that Veterinary Service emergency management policies, strategies, and responses are current with national and international standards
- Three staffs
 - **Interagency Coordination**
 - Preparedness and Response
 - National Veterinary Stockpile
- Work closely with other Federal Agencies and International Organizations

The Federal Organization – Emergency Management and Diagnostics



My time there

- Summer 2006
 - Junior Veterinary Student
 - May – August
 - Best Project!
- Summer 2008
 - Recent Graduate
 - June – September
 - Much more interesting!
 - Much more organized!



Summer Internship 2006

- Projects
 - USDA APHIS Avian Influenza Situation Report
 - Carcass Disposal: Outdoor Composting Training Course
- Training
 - Foreign Animal Disease Practitioner's Course



Avian Influenza Situation Report

- Minor Project
- Lesson in humility
- Tracked spread of AI abroad
- Informed APHIS about progress made within NCAHEM for AI
 - Included Disease SOP
 - Modeling
 - Import/Export Restrictions

Outdoor Composting Training Module

- Major Project
- Favorite project to work on!
- Series of Online Training Courses designed to aid in the disposal of mass quantities of carcasses
- Series included
 - In-House Composting
 - Outside Composting
 - Landfill Disposal
 - Off-Site Burial and Treatment
- Outdoor Composting
 - PPE
 - ICS Disposal Unit
 - Disposal Planning
 - Obtaining Resources and Materials
 - Preparation for Outdoor Composting
 - Composting Carcasses
 - Maintaining the Compost Site
- Led by Lori Miller
 - Environmental Engineer



Foreign Animal Disease Practitioner's Course

- Alternative to the Foreign Animal Disease Diagnostician Course
- Video Conference of lectures given at Plum Island
- Supplemental Labs and Necropsies
- 5 days
- 3 locations
 - Riverdale, MD
 - Ft. Collins, CO
 - Ames, IA
- Able to respond in the event that a FADD is unavailable or too far away



Summer Internship 2008

- Projects
 - Geographical Information Systems Mapping Template Survey Report
 - National Veterinary Stockpile
 - Disease Outbreak Standard Operating Procedures Template
 - Emergency Shelter for You and Your Animals Design Team
- Field Activities
- Training
- Meetings
- Veterinary Career Opportunities with the Federal Government



Geographical Information Systems Mapping Template Survey Report

- Working Group was formed
 - Objective of developing a template for all Veterinary Services mapping applications
 - Develop a set of standard maps
- Survey originally sent out
 - Early 2008
 - Various federal and state employees
 - Regional Epidemiologists
 - Animal Health Technicians
 - National Incident Management team members.
 - Determine the desired mapping equipment that would allow those responding in the field to effectively communicate
 - Sent out using Survey Monkey
- Project involved evaluating and interpreting the survey results
 - Data was presented graphically
 - Summaries were described and interpreted

Question 1: Have you had experience in animal health incidents?

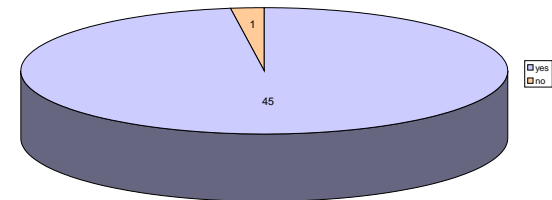


Figure 1

Question 2a: Have you used this product?

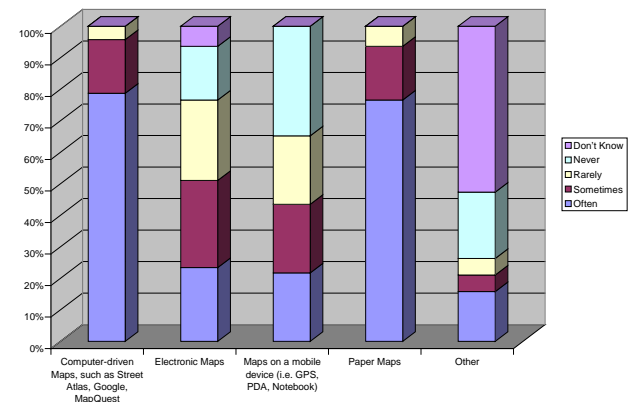


Figure 2a

National Veterinary Stockpile

- Lesson in bureaucracy!
- Prepare for the potential for a foreign animal disease
 - Arranging for the appropriation of or physically storing supplies needed in the event of an outbreak
 - Includes having animal vaccines, antiviral, or therapeutic products
 - Designed to be able to be deployed in 24 hours
- Want to be prepared or actively preparing for seventeen of the most threatening diseases to animal health and the economy by the year 2014
 - Include Avian Influenza, Foot and Mouth Disease, African Horse Sickness, Rift Valley Fever, Rinderpest, and Classical Swine Fever, among others

National Veterinary Stockpile

- First priority was Avian Influenza
 - currently well prepared
- Focus has moved to Foot and Mouth Disease
- Project involved gathering information about large animal handling equipment
 - Activities included:
 - internet-based research on manufacturers and distributors
 - equipment database development
 - personnel database development
 - coordination with NVS personnel
 - development of a memo and survey for state veterinarians to determine their capabilities and equipment/supply needs

Disease Outbreak Standard Operating Procedures Template

- Originally based off the Exotic New Castle Disease Standard Operating Procedure (SOP) Manual
 - Created after the 2003 California outbreak
 - Guide for potential future outbreaks of END
- Also used the SOP for Avian Influenza
 - Created in 2006
 - To be used in the event of an AI outbreak in the United States
- Contained a broad range of information
 - Procedures for testing and quarantine
 - Disposal
 - Epidemiology
 - Interacting with the public
- Ultimate goal is to have a specific SOP for each foreign animal disease
- Immediate goal is to generate a non-disease specific SOP that can be used as a starting point in the event of any animal disease outbreak
 - Modifications included:
 - removing species specific information
 - merging related chapters
 - synchronizing language with ICS terminology
 - creating a general flow to the writing and grammar edits
- Idea is not for the generic SOP to stand alone, but to be used as a starting point for other SOPs
- First draft completed September 2008



Emergency Shelter for You and Your Animals Design Team

- Worked with the USDA Cooperative State Research, Education, and Extension Service (CSREES)
- Recognition after Hurricane Katrina that state and local response capacity may be easily overwhelmed in the wake of a large-scale disaster
 - 4-H Youth Development Program's Science, Engineering, and Technology (SET) initiative and Agriculture in the Classroom programs
 - Alert, Evacuate, and Shelter Program (AESP)
- AESP
 - Use geospatial technology to capture evacuation routes and shelter data
 - Focuses on the states along the coast of the Gulf of Mexico and Southeastern United States
 - Observed that many shelters are human-only shelters and will not allow an evacuee to bring their pets
 - Expanded shelter data to include those appropriate for pets





Emergency Shelter for You and Your Animals Design Team

- The Emergency Shelter for You and Your Animals Design Team
 - Consists of specialists with backgrounds in education, outreach, technology, veterinary medicine, emergency management, and animal shelter management
 - Provide guidance to the participants and support AESP program development
 - Expand the program to all parts of the country
 - Goal is to include pre-veterinary and veterinary students where appropriate
- Activities this summer included information gathering and mission statement development
- Long term project



Field Activities

- Delaware State Fair
- Goose Round-up
- MD/DC/DE Field Office Activities
- National Zoo
- NIH Large Animal ICU
- FDA CVM Labs

Delaware State Fair

- Dover, Delaware
- Run by MD/DE/DC Area Office “Worked the booth”
 - Provided educational handouts and information to the general public
 - Yearly emphasis on the National Animal Identification System
 - Spoke with dozens of people
- Ate lots of fair food!





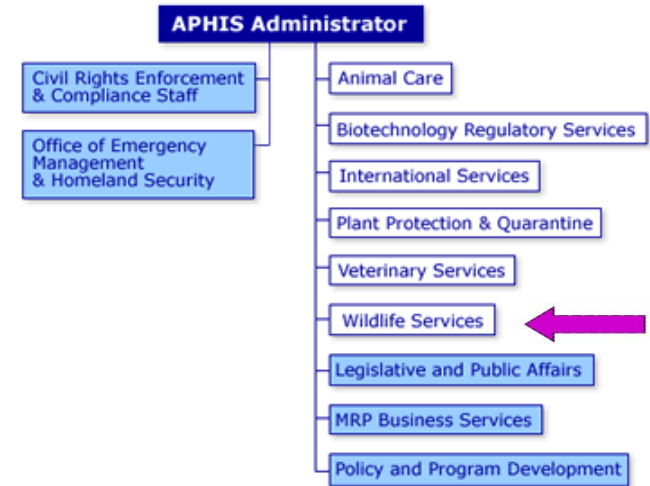
Poultry in the Newcastle Building?





Goose Round Up

- Run by Wildlife Services
 - dedicated to help resolve conflicts between people and wildlife
 - Initially provide education and training in how to deal with these conflicts
 - May resort to collecting the animals
- Retirement Community in Salisbury, MD
 - Complaint of Canadian Geese
 - causing an increase in fecal matter
 - risk to motor vehicles
 - risk to residents as the geese were protective of their nests
 - Gathered geese and sent to slaughter
 - After several unsuccessful attempts to keep the geese out
 - including fencing, dogs, and habitat alteration
 - Meat donated to Area Food Bank





National Zoo

- With Animal Care
 - determine the standards of humane care and treatment for animals
 - through education and inspection
- Went on a tour of the National Zoo with Dr. Gloria McFadden
 - Animal Care inspector
- Walked through the zoo
 - discussed what the guidelines were
 - what she specifically looked for when doing an inspection at a zoo
 - Discussed the regulations laid out in the Animal Welfare Act
- Given a behind the scenes tour of the Asian Trail exhibit and the Seal and Sea Lion Exhibit



National Institutes of Health Large Animal ICU

- NIH
 - dedicated to the research of human diseases and pathogens
 - Animals are a necessary part
 - findings benefit not only humans but the animals as well
- Spent a day in the large animal ICU with Dr. Tanya Burkholder
 - Worked with the animals being used in research
 - “large animals”
 - dogs and pigs
 - mice
 - Evaluated the animals and their disease progression
 - Overall wellness of the animal
- Research being conducted included
 - mitral valve disease in pigs
 - leukocyte adhesion deficiency represented in Irish Setters



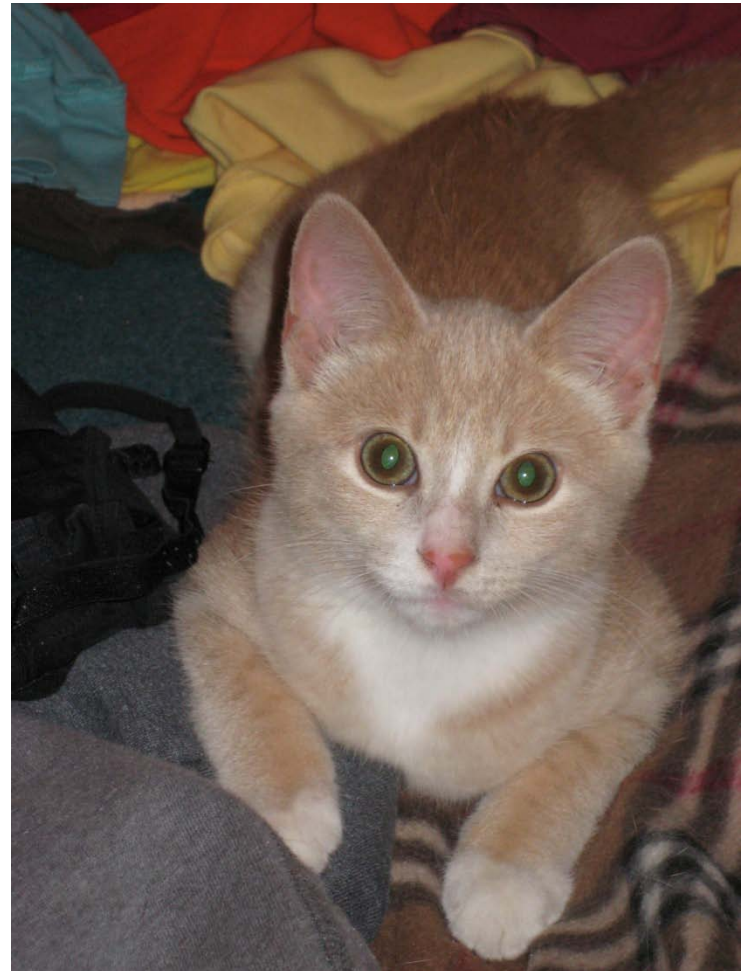
Food and Drug Administration Center for Veterinary Medicine Laboratory

- Research Farm in Laurel, MD
 - Cattle and swine facilities
 - Various laboratories
- At the Center for Veterinary Medicine
 - “regulates the manufacture and distribution of food additives and drugs that will be given to animals”
 - Consumer Protection Organization
- Just don't ask about tomatoes!



MD/DC/DE Field Office Activities

- Scrapie Flock Inspections
- BSL-3 Lab Inspection
 - Baltimore Veterans Hospital
- Laboratory Permit Inspections
- Kitten rescuing!



Training

- Incident Command System (ICS)
 - Online Training Courses for Emergency Management
 - Developed for the purpose of organizing emergency response to Wildfires
 - Gives Organization to Emergency Management
- Live Bird Market System
 - Continuing Education Training Course
 - August 19-21
 - University of Connecticut, Storrs, CT
 - Hosted by USDA
 - Attendees were:
 - State Officials
 - Caribbean Officials

Incident Command System

- ICS100
 - Introduction to the Incident Command System
 - Introduces the ICS and provides the foundation for higher level ICS training
 - Describes the history, features and principles, and organizational structure of the Incident Command System
 - 3 hour online course
- ICS200
 - Designed to enable personnel to operate efficiently during an incident or event within the ICS
 - Provides training and resources for personnel who are likely to assume a supervisory position within the ICS
 - 3 hour online course



Live Bird Market System Training

- Storrs, Connecticut
- August 19-21, 2008
- Lectures
 - Overview of USDA National Notifiable Avian Influenza Surveillance;
 - Respiratory Diseases of Poultry/ Diseases of Game Birds;
 - Wild Birds Risk Based Surveillance;
 - Personal Protective Equipment Guidelines;
 - Biosecurity and Records Auditing;
 - National Avian Influenza Cooperative Agreements;
 - Euthanasia and Disposal;
 - Appraisal and Indemnity Guidance;
 - National Veterinary Services Laboratory Surveillance Testing;
 - Cleaning and Disinfection of Live Bird Markets;
 - Updates on the Live Bird Markets in Mexico and the Dominican Republic;
 - Cultural Awareness;
- Exercises
 - Communication;
 - GPS;
- Tour of Live Bird Market Distributor;
- Avian Handling and Sampling Wet Lab



Live Bird Market Distributor Tour



Crates



Crate Washer

Live Bird Market Distributor Tour



Patrice Klein
Senior Staff Veterinarian/Avian Diseases
USDA APHIS VS
Riverdale, MD

Fidelis Hegngi
Senior Staff Veterinarian
USDA APHIS VS
Riverdale, MD

Tony Impoco
Live Bird Market Distributor

Michael Kornreich
VMO, Poultry Specialist
USDA APHIS VS
Sutton, MA

Meetings

- USDA/FDA Collaborative meeting for Pandemic Influenza Exercise
 - To occur in Fall 2008
- Veterinary Services Careers Video
 - Recruitment Video
- Foreign Animal Disease Threats Working Group
 - Department of Homeland Security, USDA, Department of Health and Human Services, Food and Drug Administration, etc.
- Developed Careers in Veterinary Medicine Contacts Database
- Animal Health Australia Seminar

Veterinary Career Opportunities within the Federal Government

- USDA
 - Plant Protection and Quarantine
 - National Center for Import and Export
 - Homeland Security Office
 - National Veterinary Stockpile
 - Animal Care
 - Maryland/Delaware/D.C Area Office
 - Illinois Area Office
- Public Health Service
- Food and Drug Administration
 - Center for Veterinary Medicine
- National Institutes of Health
 - Division of Veterinary Resources
- Executive Branch
 - Office of Science and Technology
- Department of Homeland Security
 - Joint Agro-defense Office
- National Association of Federal Veterinarians



The positives

- Very extensive networking base
 - Want a job? – you got it!
- Very diverse topics
- Very veterinary related
- Good alternative to traditional veterinary roles
- Center of the action



The negatives

- BUREACRACY!!
- Long term projects
- Only appropriate for Veterinarians
- Desk Projects
- Often felt in the way
- Older population



It's all about who you know

- In the end it's still how I got my job!

