Outline

- New Staffing at WSDA
- Initial State Response and Containment Plan
- Live Bird Marketing Meeting 2013
- Disease Surveillance Activities
- Reportable Diseases of Poultry Update
- Avian Influenza Tabletop Exercise
- Kifco Avi-Foam Guard Demonstration
- Secure Egg Supply Plan Update
- Secure Broiler Supply Plan Update
New Staff at WSDA

- Director, Donald "Bud" Hover
- Acting Assistant Director, Mark Johnson
- Acting State Veterinarian, Dr. Paul Kohrs
- Veterinary Medical Officer, Dr. Thomas Gilliom
- Veterinary Medical Officer, Dr. Amber Ittle
- Reserve Veterinary Corps, Veterinary Medical Officer
- Lead Compliance Investigator, Sean Hartsock


Initial State Response and Containment Plan for Low Pathogenic Notifiable Avian Influenza and Emergency Poultry Diseases

Emergency Poultry Disease Management Plan 2006

Initial State Response and Containment Plan 2012 (ISRCP)
- State required to have USDA approved ISRCP for indemnity
- Flock Plan for LPAI H5/H7 euthanasia, controlled marketing, disposal, and cleaning and disinfection procedures for commercial premises in Washington
- A signed flock plan and compliance agreement in place prior to initiating any activities for which indemnity will be claimed
Live Bird Marketing System Working Group
Seattle, February 20-21, 2013,

**Live Bird Marketing System Uniform Standards**
- Definition of poultry changed to reflect OIE standard
  - Poultry: all birds for production of meat or eggs, backyard poultry, game bird, fighting cocks
  - Not poultry: birds kept for shows, races, exhibitions, competitions, pets or for breeding
- Duck cloacal swab acceptable for AI rRT-PCR test
- Lab costs will be removed from State umbrella cooperative agreement and go directly to the lab

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**Avian Influenza Disease Surveillance Activities**

<table>
<thead>
<tr>
<th>Species</th>
<th>Number of Birds Tested</th>
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</thead>
<tbody>
<tr>
<td>Commercial Broilers</td>
<td>13,299</td>
</tr>
<tr>
<td>Commercial Broiler Breeder</td>
<td>44</td>
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<tr>
<td>Commercial Layers</td>
<td>2,068</td>
</tr>
<tr>
<td>NPIP</td>
<td>840</td>
</tr>
<tr>
<td>Auctions</td>
<td>1,800</td>
</tr>
<tr>
<td>Upland Game Birds</td>
<td>230</td>
</tr>
<tr>
<td>High Risk Flocks</td>
<td>830</td>
</tr>
<tr>
<td>Fairs</td>
<td>510</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19,621</strong></td>
</tr>
</tbody>
</table>

Budgeted cost for diagnostic testing $50,300
Education and Outreach

- USDA Live Bird Marketing Meeting 2013
- Avian Influenza, Kifco Avi-Foam training and Incident Command System, Elmer
- 4H Clubs Benton Franklin Fairgrounds
- Puyallup Fairgrounds, Mother Earth Fair
- Avian Influenza Tabletop
- Emergency Disaster Education Network
- Birds of Washington Calendar
- Online Poultry 101 and Avian Disease Prevention Training Courses

http://agr.wa.gov/FoodAnimal/AvianHealth/AvianCertificationTraining.aspx

Reportable Diseases Update

Avian Influenza Surveillance
- Commercial broiler, influenza A, H1
- Poultry auction, influenza A, non-H5/H7

Infectious Laryngotracheitis
- Commercial layer, suspect CEO ILT
- Backyard flock, suspect CEO ILT
- NPIP flock, suspect CEO ILT

Newcastle Disease
- Velogenic Newcastle Disease, cormorants (2)

Salmonella group D positive, rescue poultry CA
Reverse Zoonosis
Human Influenza A H1N1 Transmission to Animals

USDA Studies On 2009 Novel H1N1 Influenza And Turkeys
http://www.usda.gov/wps/portal/usda/usdahome?navid=USDA_H1N1

China Avian Influenza A H7N9

confirmed fatal case  confirmed case
**Avian Influenza in Poultry**

**Highly Pathogenic AI (HPAI Response Plan)**
- HPAI H5N1 not detected in US
- HPAI H5N1 endemic in Bangladesh, China, Egypt, India, Indonesia, Vietnam
- Occasional outbreaks of AI H5/H7
- Signs – high mortality

**Low Pathogenic AI (Initial State Response Plan)**
- Endemic in US wild waterfowl, shorebirds
- Sporadic outbreak in domestic poultry
- Signs - decreased production
US Newcastle Disease

- 1992 turkeys (ND)
- 1998 game fowl (CA Fresno)
- 2002-03 chickens, wild birds, pet birds, game fowl ($167M)
- 2009 an imported rosella in CA quarantine facility
- 2005-09 pigeon paramyxovirus type-1 in pigeons/doves
- Double crested cormorants
  - 1992 major outbreak spread to range turkeys, North Dakota
  - 2003 in VT, NY, OR
  - 2005 in NV
  - 2006 in NV and WI
  - 2008 - multiple years in identified in CT, MN, PA and WI
  - 2011 - Florida

Washington State
Avian Paramyxovirus and Velogenic Newcastle Disease Virus (NDV)

- 2011 – Muscovy duck, virus isolation positive LoNDV
- 2011 – Muscovy duck, virus isolation positive paramyxovirus type 1
- 2011 – Chickens, unvaccinated NPIP flock low serum titer
- 2011 – Double crested cormorants, East Sand Island, LoNDV, Velogenic NDV
  - Adult cormorant taken to Astoria animal refuge, velogenic NDV confirmed at NVSL
  - Wildlife veterinarian visited animal refuge
- 2013 – Double crested cormorants, East Sand Island
Newcastle Disease Clinical Signs and Pathology

- Velogenic - high mortality
  - Viscerotropic: intestinal haemorrhage
  - Neurotropic velogenic: respiratory, nervous signs
- Mesogenic: low mortality, respiratory signs, occasional nervous signs
- Lentogenic: mild respiratory infection
- Asymptomatic: subclinical enteric infection

Cormorant Sites in Canada and USA
East Sand Island

Annual Nesting Chronology

Cormorants arrive on colony
First egg
First chick
First fledging

Date Range (2003-2011)  2012

Breeding Pairs
- 1-9
- 9-20
- 21-100
- 101-500
- 5001-10,000

- Rare
- Migration
- Neotone
- Winter
- Summer

Washington State Department of Agriculture Avian Influenza, ILT and Newcastle Disease Update

Lyndon Badcoe

11/05/2013
Lyndon Badcoe

Quarantine Structure
Animal Disease Emergency

- Infected Premise
- Contact Premise
- Infected Zone
- Suspect Premise
- Buffer Zone
- Controlled entry/exit
- Surveillance Zone
- At Risk Premise
- Free Zone
- Free Premise

Highly Pathogenic Avian Influenza
Response Plan

Goals of an HPAI Response Plan
- Detect, control, and contain HPAI
- Protect public health; stabilize animal agriculture, food supply, and economy
- Facilitate continuity of business

How the SES Plan Works...

Highly Pathogenic Avian Influenza
Secure Egg Supply Plan

Requirements for Secure Egg Supply Plan
- Audited minimum biosecurity standards: Biosecurity Checklist
- Epidemiology data to identify potential exposure: Epidemiological Questionnaire
- Active surveillance in each layer house via daily RRT-PCR testing
- Secure website registration:
  To share information with Incident Commander

http://secureeggsupply.com/fast-eggs-plan/

Washington State Avian Sub-Populations

Hatcheries
Commercial Layers
Commodity Exchange
Commercial Broilers
Research
Wild Birds
Exotic Birds
Tours
Migration
Exhibitions
Pet Stores
Pet Birds
Ducks
Swaps
Auctions
Slaughter
Backyard
Game Birds
Zoos
Feed Stores
Lyndon Badcoe
Highly Pathogenic Avian Influenza Response
Secure Egg Supply (SES) Plan
Product Movement

- Pasteurized Liquid Eggs
- Non-Pasteurized Liquid Eggs
- Washed & Sanitized Shell Eggs
- Nest Run Shell Eggs
- Layer Hatching Eggs
- Layer Day-Old Chicks
- Egg Shells
- Inedible Eggs
- Manure
- Pullets
- Hens

http://secureeggsupply.com

Secure Egg Supply (SES) Plan
Washed and Sanitized Shell Eggs to Premises with Poultry
Indemnity for Avian Influenza

- USDA is authorized to pay indemnity for 100% of eligible costs related to infected or exposed poultry in a state that is compliant with state-required NPIP provisions
- 25% paid to producers who reside in a State that is not compliant with NPIP provisions
Depopulation

- Agreement for USDA to pay indemnity must occur before depopulation
- Euthanase affected birds to help prevent spread of the disease

Kifco Avi-FoamGuard Foamer Unit
Avian Foam Depopulation

Foam Depopulation
- Silv-Ex Foam concentrate, water, gas
- Foam covers poultry obstructs trachea causing mechanical hypoxia

USDA-APHIS approved for:
- Rapidly spreading outbreak that cannot be contained by other means
- Structurally unsound buildings or human hazards
- Zoonotic diseases
Kifco Avi-FoamGuard Foamer Unit
Avian Foam Depopulation

Concept of Operation
- One tank at road, transfer pump to tank near Kifco Avi-FoamGuard
- Avoid tankers entering farm
- Tankers can begin refill process faster
- Reduce need for decontamination

Summary and Conclusions
- Washington poultry industry remains at high risk for low pathogenic and highly pathogenic avian influenza
- Secure Egg Supply and Secure Broiler Supply Plans provide an opportunity for continuity of business for egg and broiler producers, but requires pre-event commitment to biosecurity checklist and epidemiological questionnaire
- Initial State Response and Containment Plan is required for Washington poultry producers to be eligible for 100 percent indemnity for losses due to low pathogenic avian influenza H5/H7
- Standing Emergency Disease Management Committee needs to meet, exercise, and coordinate with tribal governments