



Chickens 101

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Train the trainers in Poultry

June 22-23 Davis, CA

June 25-26 L.A. CA

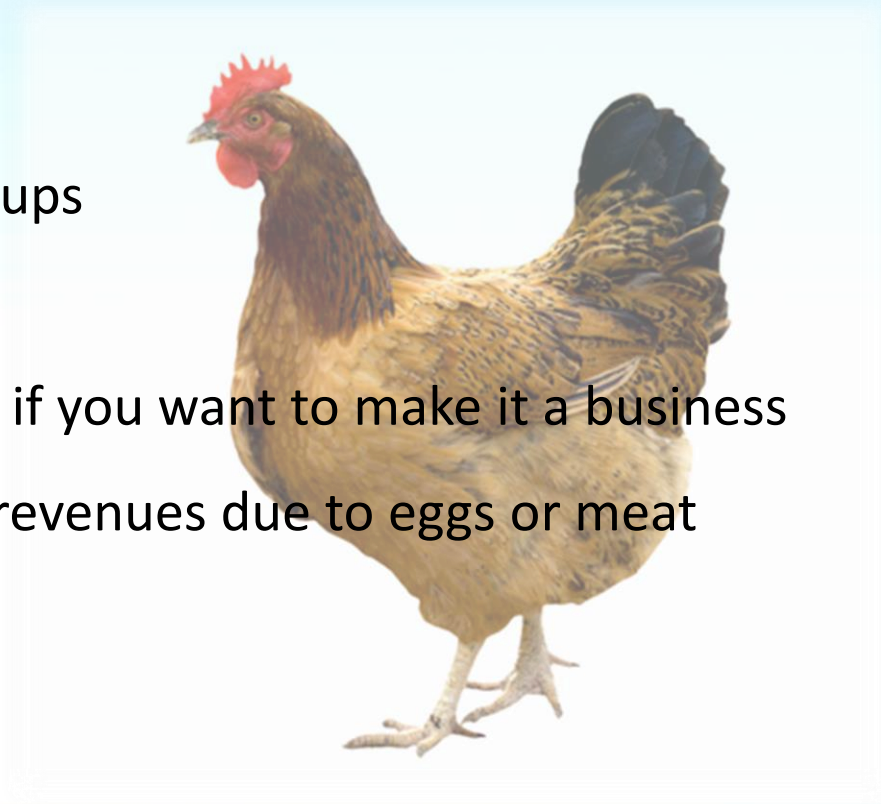
Chickens

- *Gallus gallus domesticus*
- Domesticated fowl
- Subspecies of the red junglefowl
- Most common and widespread domestic animal
- 24 Bill in 2003
- Humans keep them primarily as food source (meat and eggs)



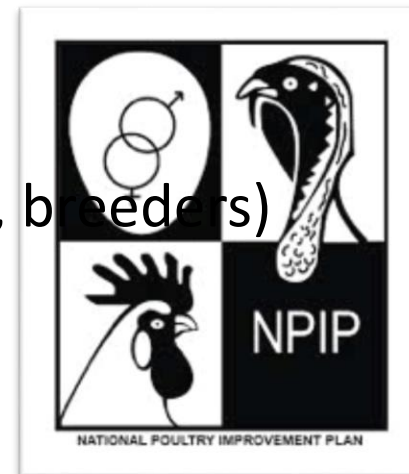
Why keeping poultry?

- They are ornamental
- They are fun pets
- Fast return of the investment
- Can be handled by kids and grown ups
- Small area is required
- Easy to run a pilot flock and decide if you want to make it a business
- Can provide food for the family or revenues due to eggs or meat sales



What to know before acquiring poultry

- Objective of raising poultry
- Space determination
- Investment
- City or county ordinances
- Equipment needed
- Reliable information and veterinary services
- Eggs, chicks, pullets or adults
- Reliable sources (Hatcheries, feed stores, neighbors, breeders)
- Health or vaccination status (MDV)



Different flocks, different risks and management

- Breeders (maternal antibodies)
- Multiple ages (higher risk of diseases)
- Flock size (the bigger the riskier)
- Take birds to poultry shows (risk)
- Birds are bought from different sources (auctions, hatcheries) and added to an existing flock (Quarantine area)



Flock size recommendations

- Urban flocks: follow city ordinances
- Family flock project (eggs/meat at home): 15 chicks or 6 layers
- Income producing flock: 25 pullets or 20 layers
- Broilers for home supply and sale: start with 50 to be processed at 7 to 9 weeks



- **Hobby flocks:** One pair of adults or below 10 chicks
- **Bantams garden project:** One pair of adults or below 10 chicks
(Good possibility if you cannot keep large poultry)
- **The key is not getting more than what you can handle so you have to have your own magic number**
- This numbers are debatable depending on the realities of the flocks in terms of feed, time, space, breed of chickens, etc.

Poultry uses

- Food source (eggs/meat)
- Vet science (exploring science specially for kids)
- Fancy breed keeper (400 different breeds)
- Garden fertilization
- Ornament
- Small/mid-size commercial flock

Most common breeds

- **Cornish: (Cornwald, England)**
 - White and dark
 - Sex differentiation by body conformation
 - Heavy meat producer
 - Yellow skin and brown eggs



White leghorns

- Single combs
- Foundation for commercial egg laying hens
- Great activity
- Good egg producer
- Very resistant
- Yellow skin and white egg shells



New Hampshire

- Obtained in 1915 from a Rhode Island Red foundation
- Double purpose (meat and eggs)
- Yellow skin and brown eggs



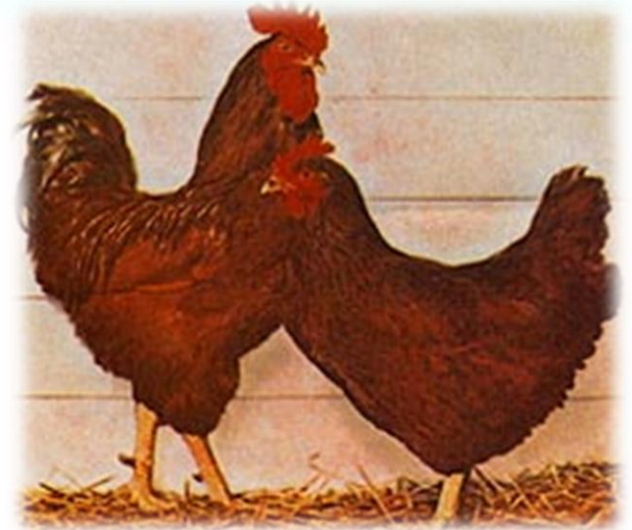
Plymouth Rock

- White and barred varieties
- Dual purpose
- Yellow skin and brown egg shell



Rhode Island Red

- Horizontal / oblong body
- Dual purpose
- Yellow skin brown to dark brown egg shells

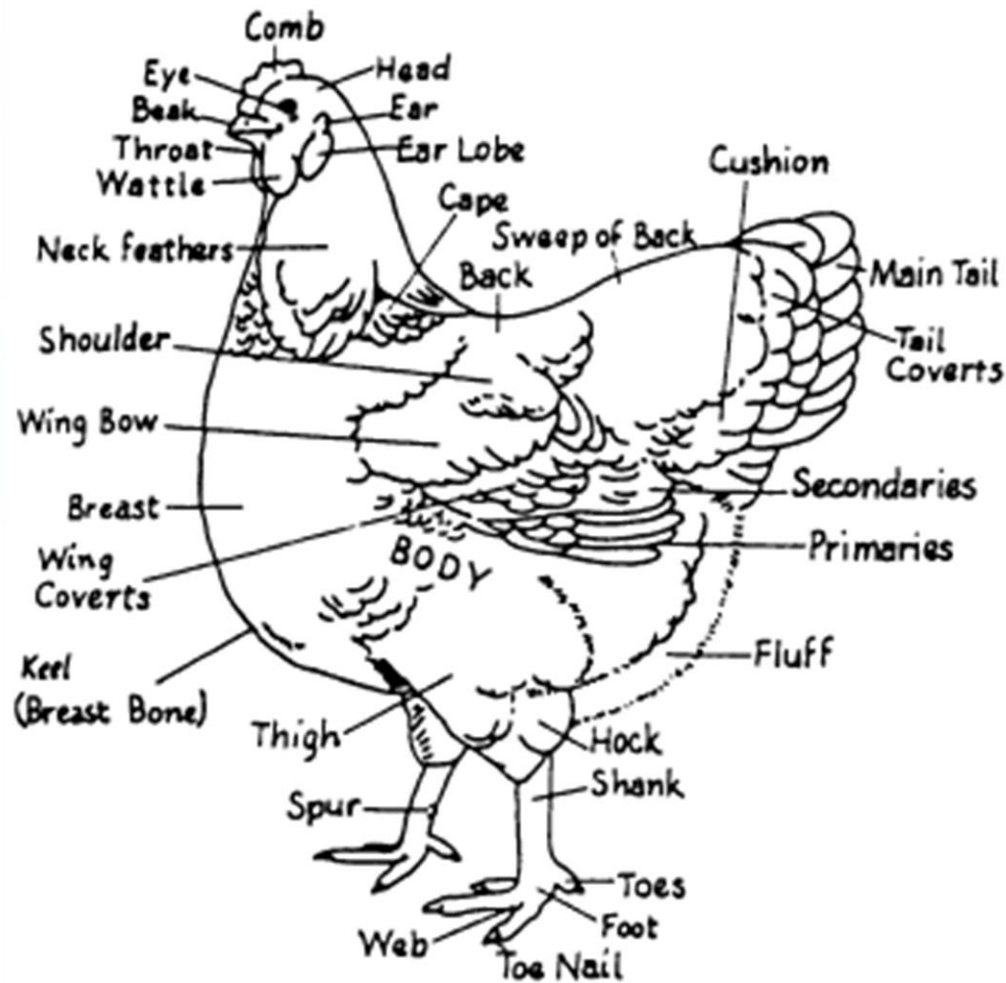


Buff Orpington

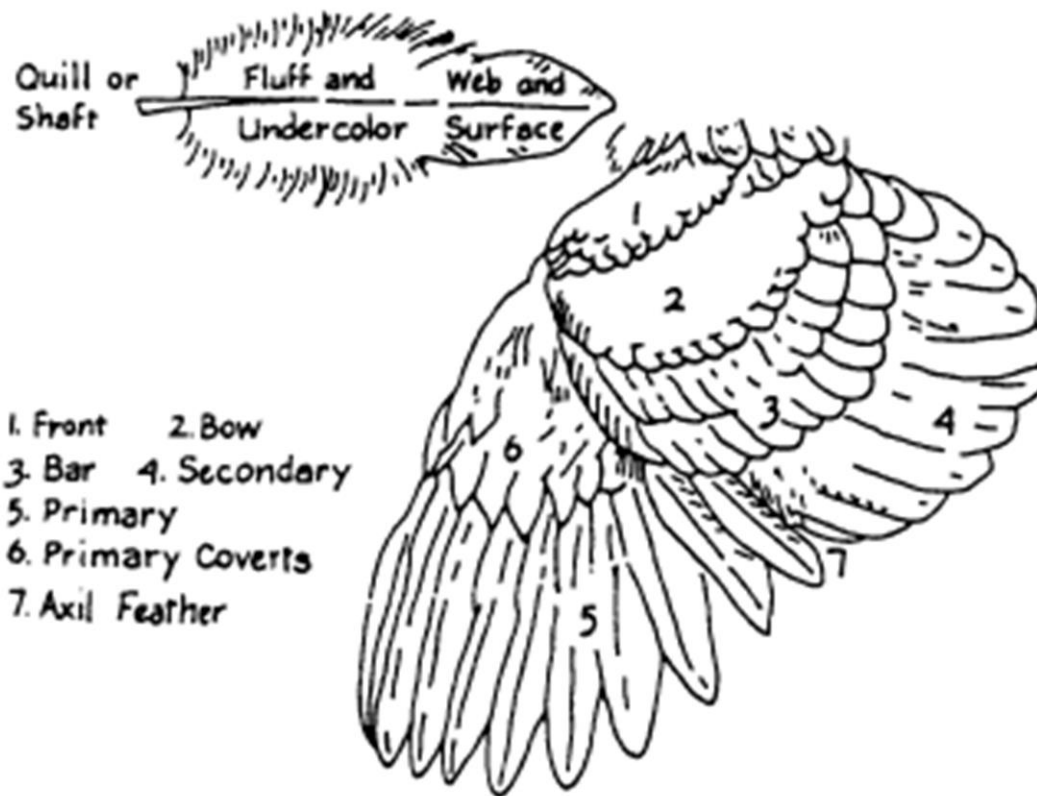
- Dual purpose breed
- White eggs and yellow skin



Anatomy: Chicken body parts



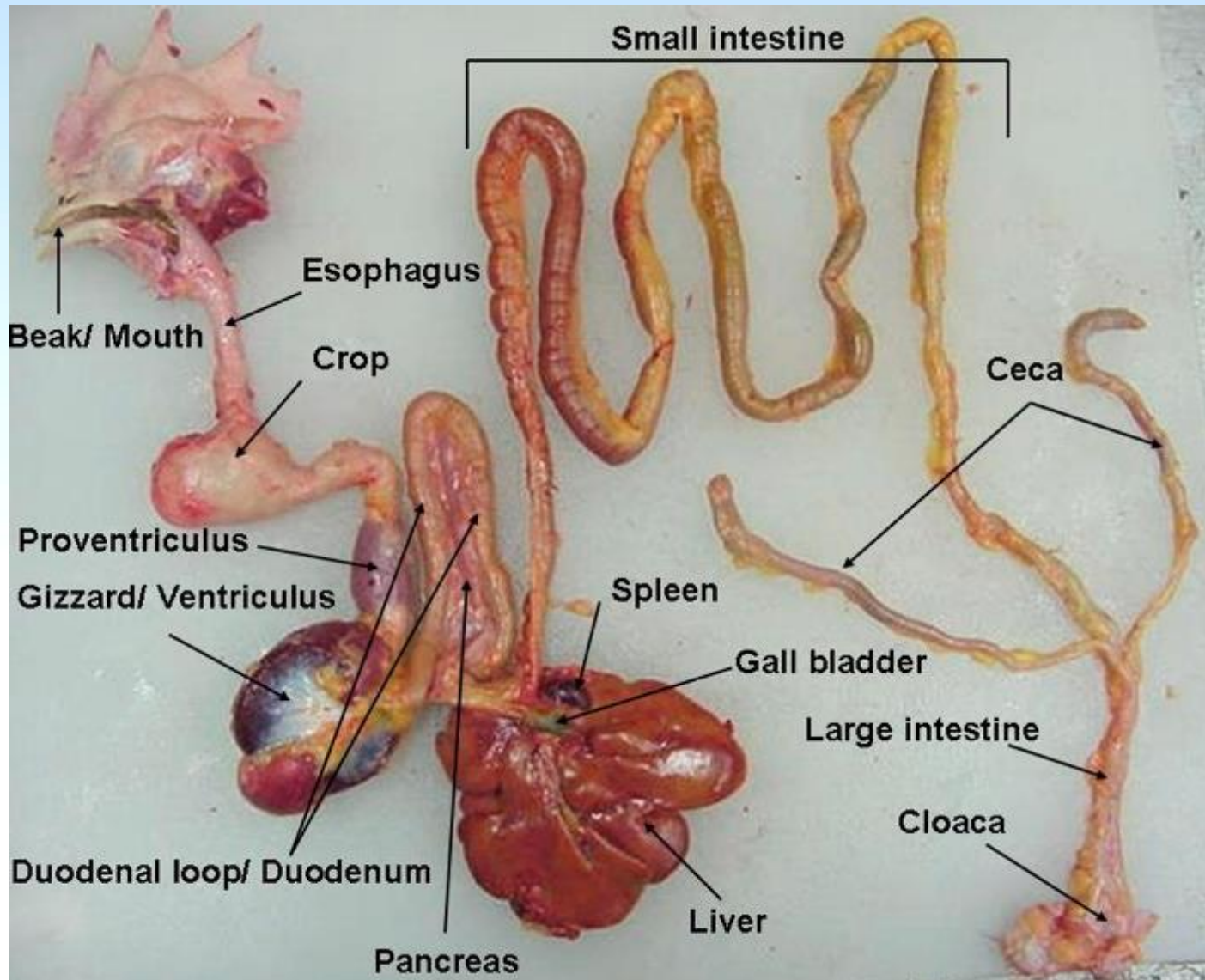
Chicken feathers



Types of combs

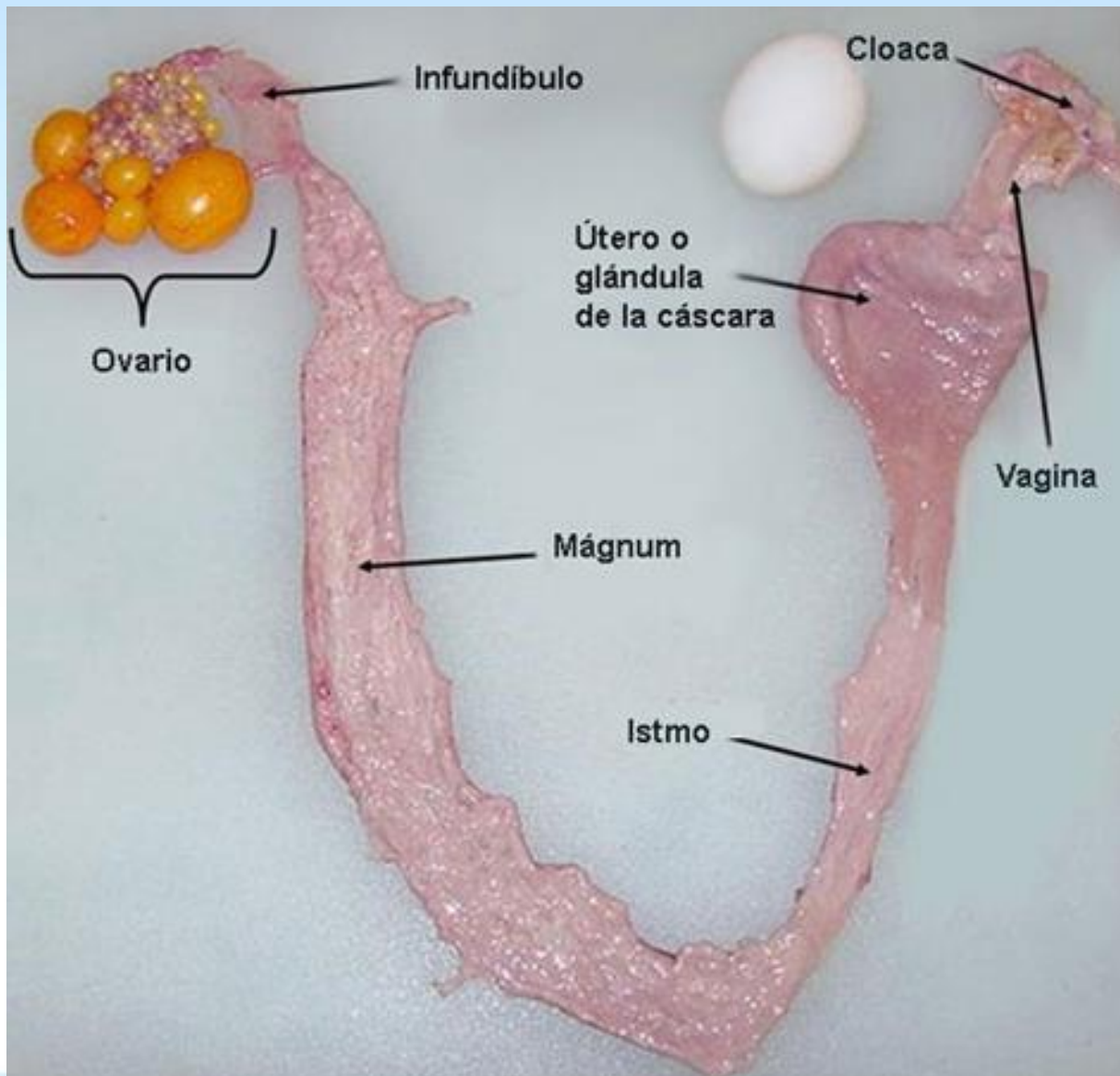


Gastrointestinal tract

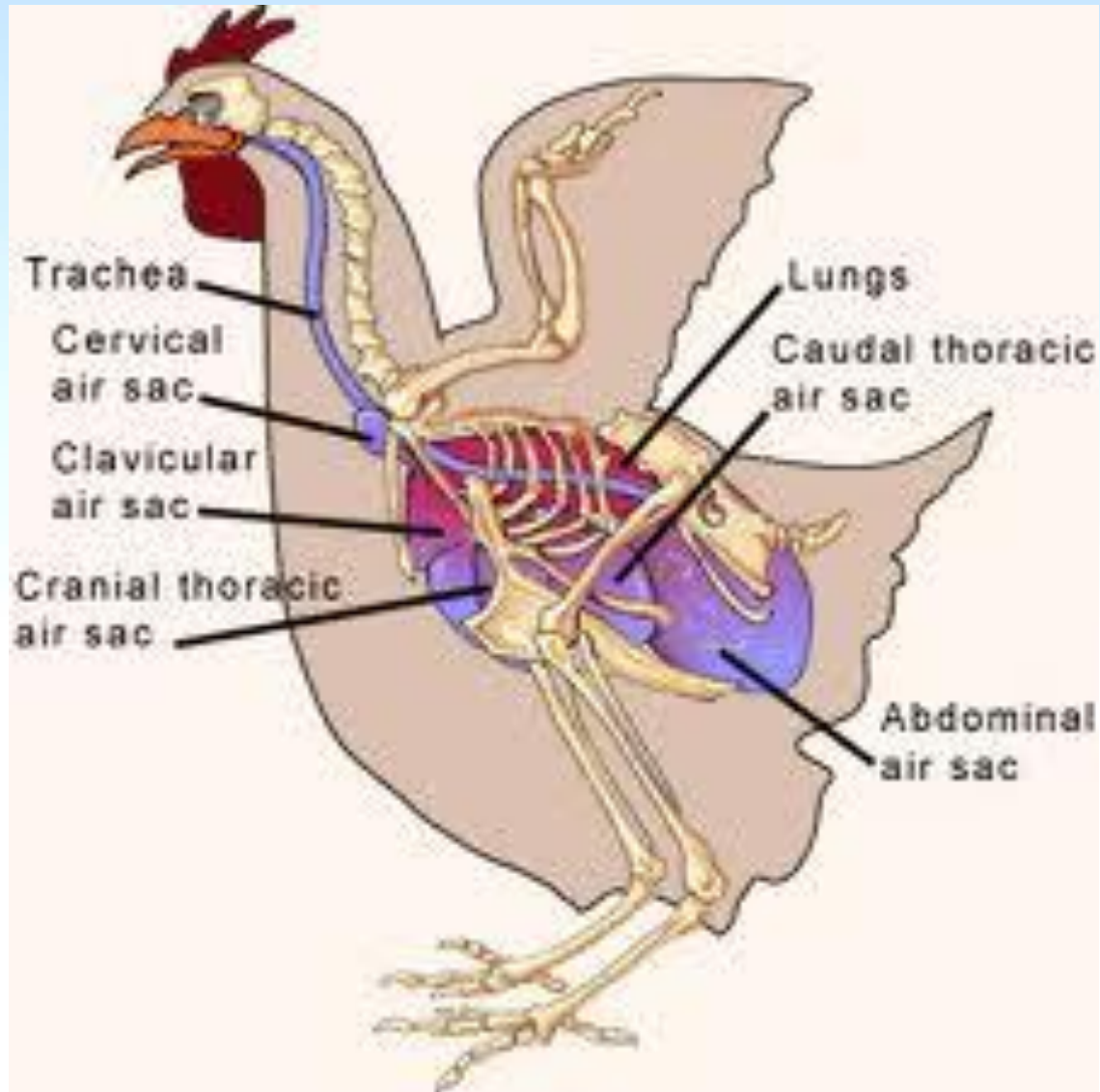


Reproductive tract

- Infundibulum
- Magnum
- Isthmus
- Uterus or shell gland
- Vagina



Respiratory tract

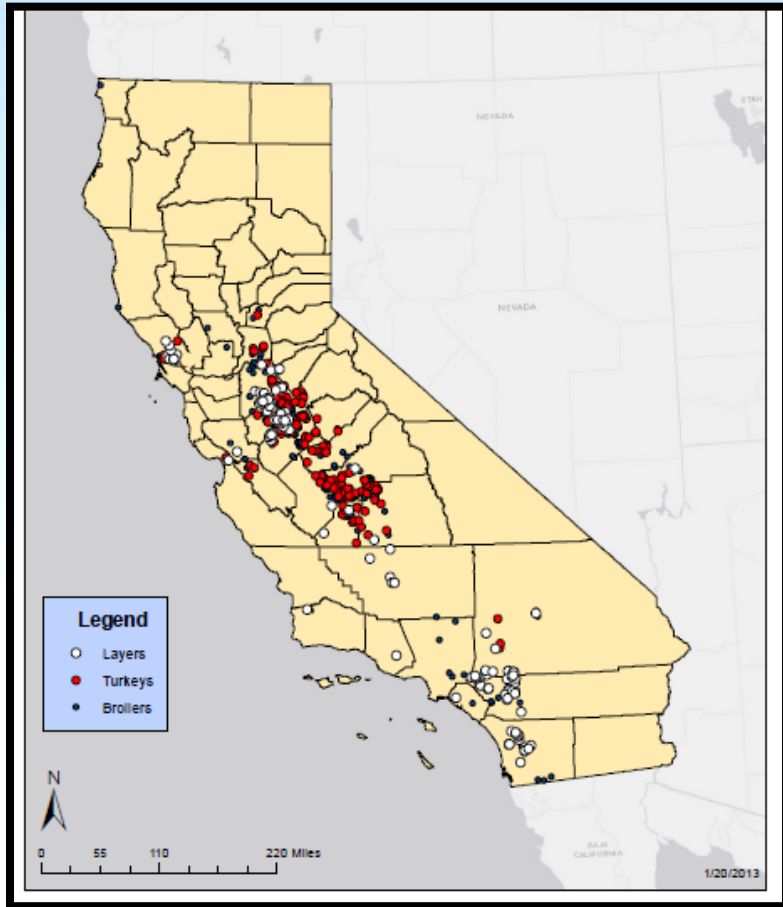


Biosecurity

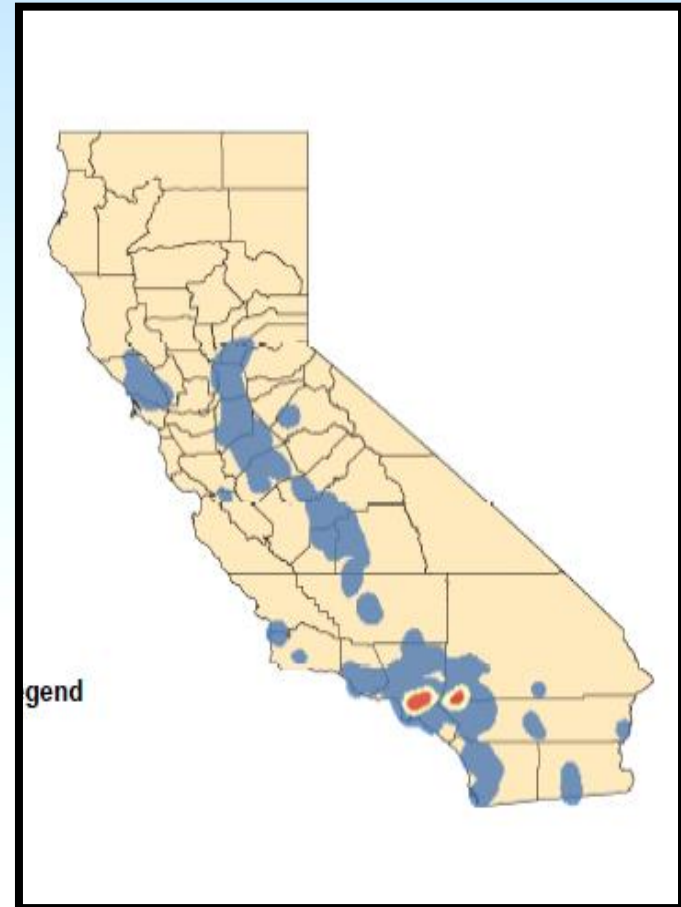
- Characteristics:
 - Realistic
 - Applicable to all the system
 - Preventive
 - Is essential



Poultry in California



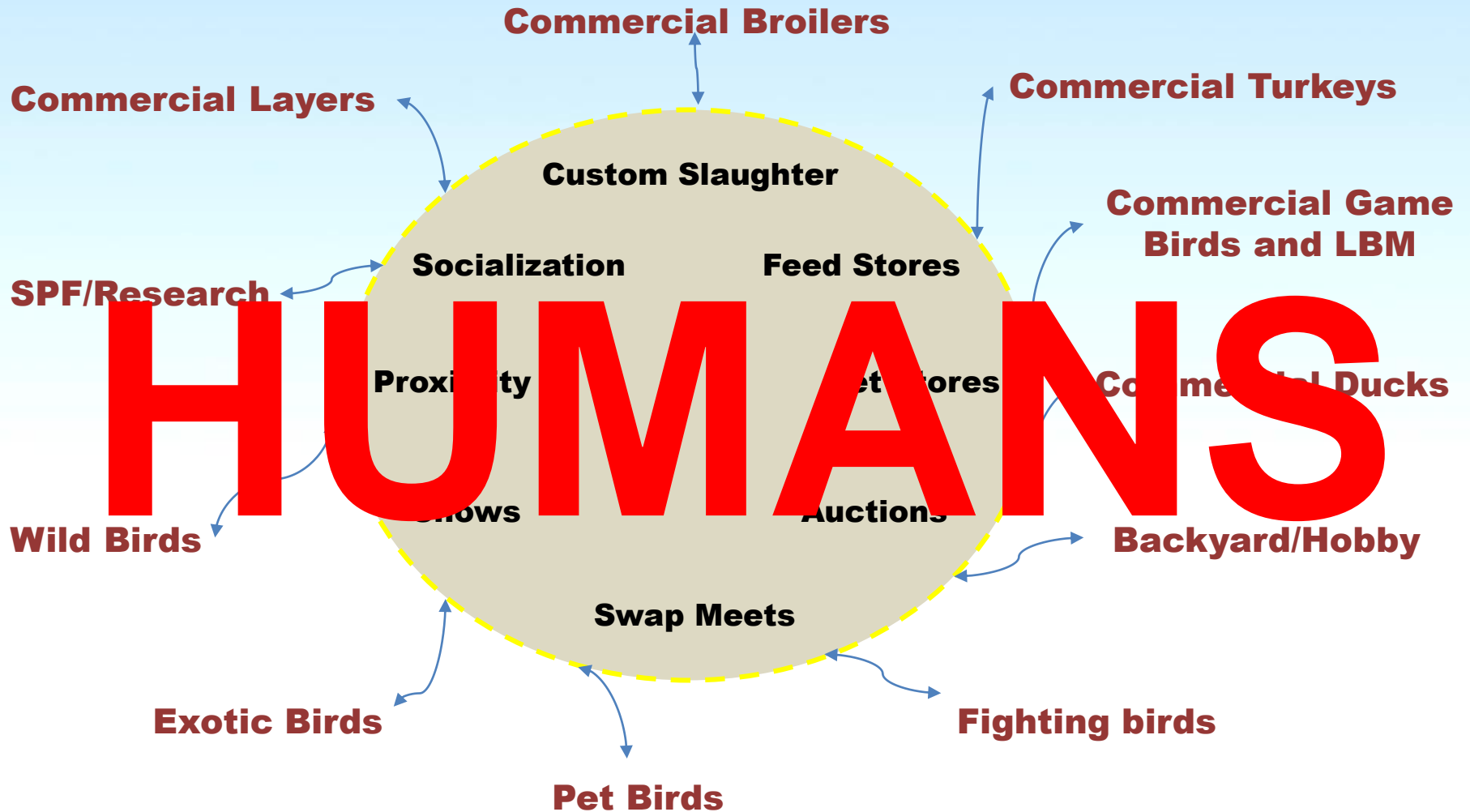
Commercial producers in CA



Backyard producers in CA

Slide provided by Dr. Maurice Pitesky

Possible avian interactions in California



Slide adapted from Dave Castellano

Potential diseases and classification in terms of biosecurity

- Biosecurity measures are evaluated according to cost-benefit
 - Ex: Importation of a disease that is not present in a country will have a high impact will be the
- According to biosecurity there are two groups of diseases

EXOTIC

ENDEMIC

Prevention

Eradication

Prevention

Limitation of
consequences

CAHFS Locations & Services



Slide courtesy of Dr. Asli Mete: CAHFS



Select List of Tests Performed on Backyard Poultry at CAHFS

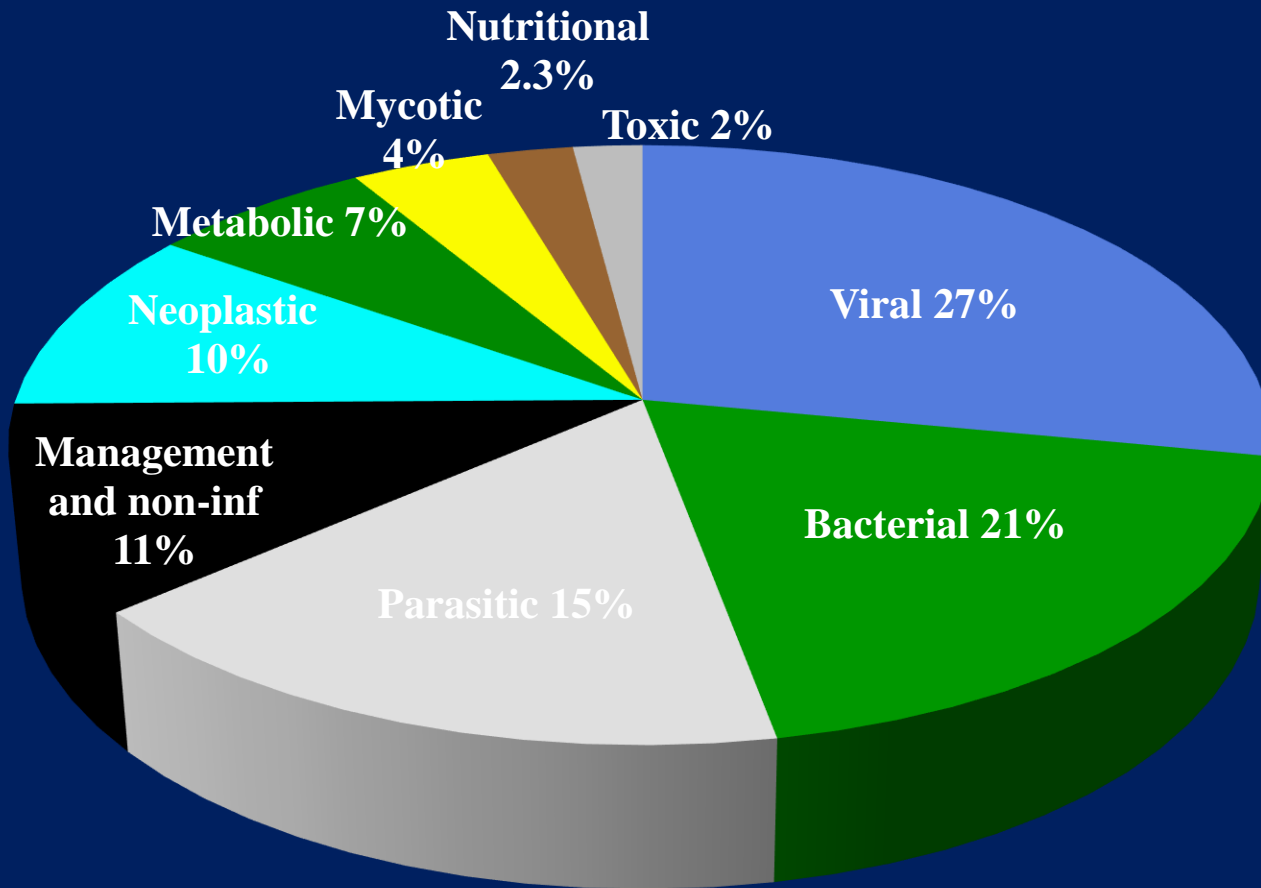
The CAHFS lab will provide some necropsy services for up to two birds at no charge for BY poultry submitted for necropsy

Poultry for backyard flock classification include chickens, turkeys, squabs and waterfowl. Total flock number must be provided and must be <1000 birds for discount necropsy.

Test Name	Specimen Type	Container/ Shipping	Fee (in state)
Bacteriology			
Bacterial aerobic culture	Swab, droppings	Cool	15.90
Botulism test (included in necropsy if testing an affected bird at necropsy). Samples not from affected bird (environmental) are extra	Environmental suspect material (dead animal)	Cool	91.60
Salmonella PCR and/or culture	Droppings, environmental drag swabs	Cool	14.70
Biotechnology/Virology			
	^a = not cotton swab		
Avian Influenza virus PCR (fluid/swab)	Oropharyngeal swab ^a	Swab in RTT or vial - not culturette	0.00
Infectious bronchitis virus PCR	Tracheal swab ^a	Swab in RTT or vial not culturette	23.70
Mycoplasma gallisepticum PCR	Tracheal swab ^a	Swab in RTT or vial not culturette	19.00
Mycoplasma synoviae PCR	Tracheal swab ^a	Swab in RTT or vial not culturette	19.00
Newcastle disease virus PCR	Oropharyngeal swab ^a	Swab in RTT or vial not culturette	0.00
Parasitology			
Direct fecal exam for coccidia and parasite eggs	~1/2 ml of fresh droppings	Cool	8.80
Flotation for parasite check	5ml droppings	Cool	10.50
Pathology			
Histopathology (only)	Tissue	Formalin/container	39.50
Necropsy up to 2 birds, same day, same problem from backyard flock species with <1000 birds	Carcass	Cool not frozen	0.00
Necropsy for >2 birds from backyard flock species with <1000 birds; and ALL poultry and waterfowl from flocks >1000 birds; 1-8 birds one price	Carcass	Cool not frozen	120.00
Serology			
Chicken respiratory serology panel (IBV, MG, MS, AI, NDV)	Serum, 1ml	RTT or serum*/cool	8.30
Avian influenza antibody test ELISA (AI)	Serum, 1ml	RTT or serum*/cool	1.70
Infectious bronchitis virus ELISA (IBV)	Serum, 1ml	RTT or serum*/cool	1.70
Infectious bursal disease ELISA (IBDV)	Serum, 1ml	RTT or serum*/cool	1.70
Infectious laryngotracheitis ELISA (ILT)	Serum, 1ml	RTT or serum*/cool	1.70

Incidence of diseases in BYF by etiology

(CAHFS 2001-2013)



N:3893

Dr. Asli Mete, CAHFS

CAHFS 2013 summary of backyard poultry diagnosis

Diagnosis	Cases/total cases	% of total cases
Marek's disease*	161/1029	16
Ovarian tumors	80/1029	7.8
FHLS	54/1029	5.2
Salpingitis by <i>E. Coli</i>	37/1029	3.6
Coccidiosis	36/1029	3.5
Bacterial salpingitis	30/1029	2.9

CAHFS, 2013

Prevalence of respiratory diseases diagnosed in BYF submissions to the CAHFS Turlock branch 2010-2012

Infectious Disease	Sample size (n=)	Percent Positive
Newcastle disease	125	7%
Infectious bronchitis	125	36%
<i>Mycoplasma gallisepticum</i>	60	75%
<i>Mycoplasma synoviae</i>	48	42%

CAHFS Turlock, 2012



How to get information: Small Flocks Study

- Main purpose: Assess the presence of antibodies to respiratory diseases in areas far and close to commercial poultry
- Blood collection (drops)
- ELISA testing
- Will help us determining the effect of commercial poultry on exposure to respiratory pathogens in small flocks
- Will help establishing preventative measures
- If interested call, email or fill out the participation sheet
- alefigueroa@ucdavis.edu or Phone: (530) 752 5327
- Funding: Center for Food Animal Health UC DAVIS (USDA/NIFA)

Where to get the information

- Internet is full of information that sometimes is not accurate
- Contact a poultry veterinarian (poultry practitioner, university, poultry extension specialist)



UC CE Poultry University of California Cooperative Extension

HOME EMAIL PRINT SITE MAP Create Search Terms

About Us Newsletters Who to Contact

Home

- Production Type
- Avian Diseases
- Disease Prevention
- Food Safety
- Additional Resources

UC DAVIS VETERINARY MEDICINE

UC Cooperative Extension Poultry

Welcome, poultry enthusiasts!

This website is designed to help you find information and resources for all of your poultry needs.

Here you can find information about:

- [Backyard Poultry](#)
- ["Micro-Commercial" \(Small-Scale\) Production](#)
- [Commercial Production](#)
- [Common Avian Diseases](#)
- and more!

Images: Eggs, Chickens, Rooster, Poultry


<http://ucanr.edu/sites/poultry/>

Train your people: Be creative

Enfermedad de Newcastle (Murina)

Sobre la enfermedad:


VIRUS



MORINA DE TRIPA

Prevencción:

- VACUNA
- CAMBIO AGUA
- LIMPIEZA
- DESINFECTACIÓN



3-4x

WILD	EXPOS
<p>REINA</p>  <p>ASCARIDOS</p> <p>Tx: <ul style="list-style-type: none"> Praxina Levamisol Flubendazol </p>	<p>Polcas</p> <p>SINUSIS</p> <p>ACIDOS</p> <p>PROJOS</p> <p>Tx: AVE</p> <p>EXPOS CALIENTES</p> <p>INSECTICIDAS</p> <p>FIPRO</p> <p>DICLANOS</p>

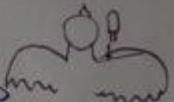
*VIRUELA AVIAR

- Cultivo

-> Inoculación

4 semanas -> cultivos


Poxvirus



Sobre la enfermedad:

VIRUS

+ Muerte si es interno + prevenir




LA CALLE DEL AGUA

Prevencción:

VACUNA viruela aviar

DESINFECTACIÓN

ELIMINA POCAS DE AGUA (mosquitos, ranas)



Be inclusive



