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IN MEMORIAM



Dr. Craig Mabray, United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) Veterinary Medical Officer and Kennel Specialist, and Dr. Steve Thompson, head of the Purdue Pet Wellness Clinic initiative and clinical associate professor in the Department of Veterinary Clinical Sciences lead discussion on canine dentistry and health.

Dr. Craig Mabray, USDA APHIS Animal Welfare Center



BEHAVIOR & WELFARE CONSIDERATIONS IN REHOMING BREEDING DOGS

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CENTER FOR ANIMAL WELFARE SCIENCE

[HTTP://VET.PURDUE.EDU/CAWS/](http://vet.purdue.edu/caws/)

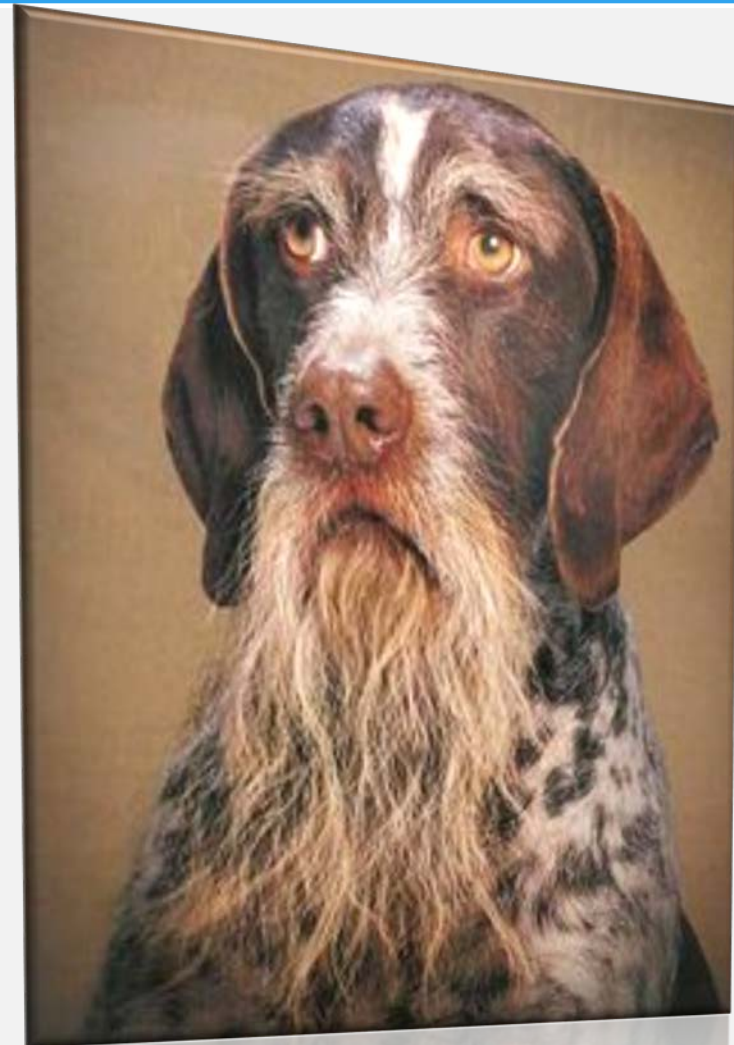
WHY REHOME?

- RESPONSIBILITY
- ETHICS
- PUBLIC EXPECTATIONS



RETIRING AND REHOMING BREEDING DOGS: DISTINCTIONS

- ALL BREEDING DOGS WILL RETIRE
- CAN THEY BE **SUCCESSFULLY** REHOMED?





COMMON COMPLAINTS/CHALLENGES WITH RETIRED BREEDING DOGS

- **UNANTICIPATED HEALTH CARE COSTS**
- **GLOBAL FEARFULNESS**
 - **LACK OF SOCIALIZATION**
- **HOUSEBREAKING ISSUES**
- **LACK OF TRAINING**
- **FINICKY EATING**

STRESSORS EXPERIENCED BY RETIRED BREEDING DOGS

Why do these problems occur?



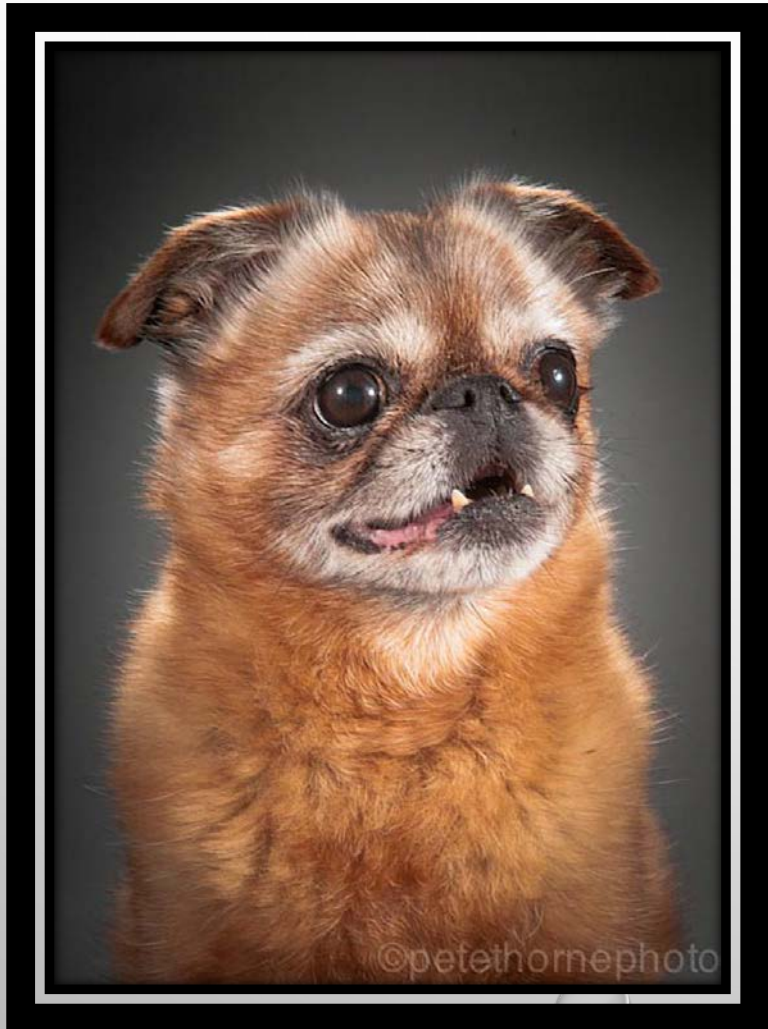
STRESS ???

WHAT STRESS ??



Rehoming \neq relocating





SETTING DOGS UP FOR SUCCESSFUL REHOMING

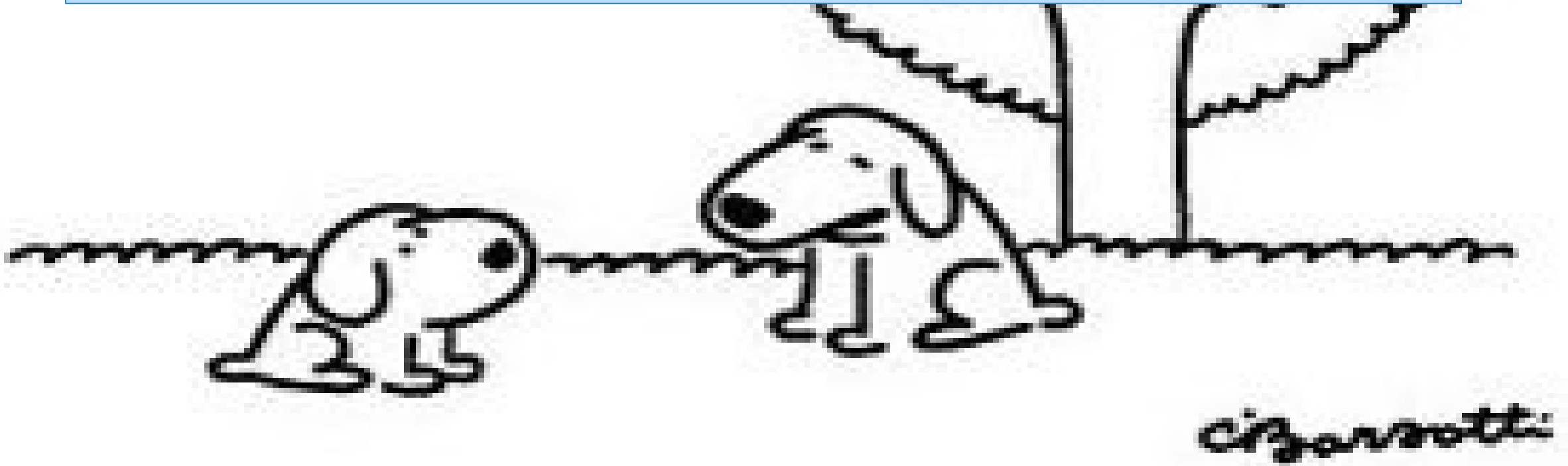
BEHAVIORAL AND MENTAL WELLNESS

Do the dogs have what they need?

- Space
- Social interactions
- Exercise
- Enrichment
- Ongoing socialization



QUALITY OF EARLY ENVIRONMENT

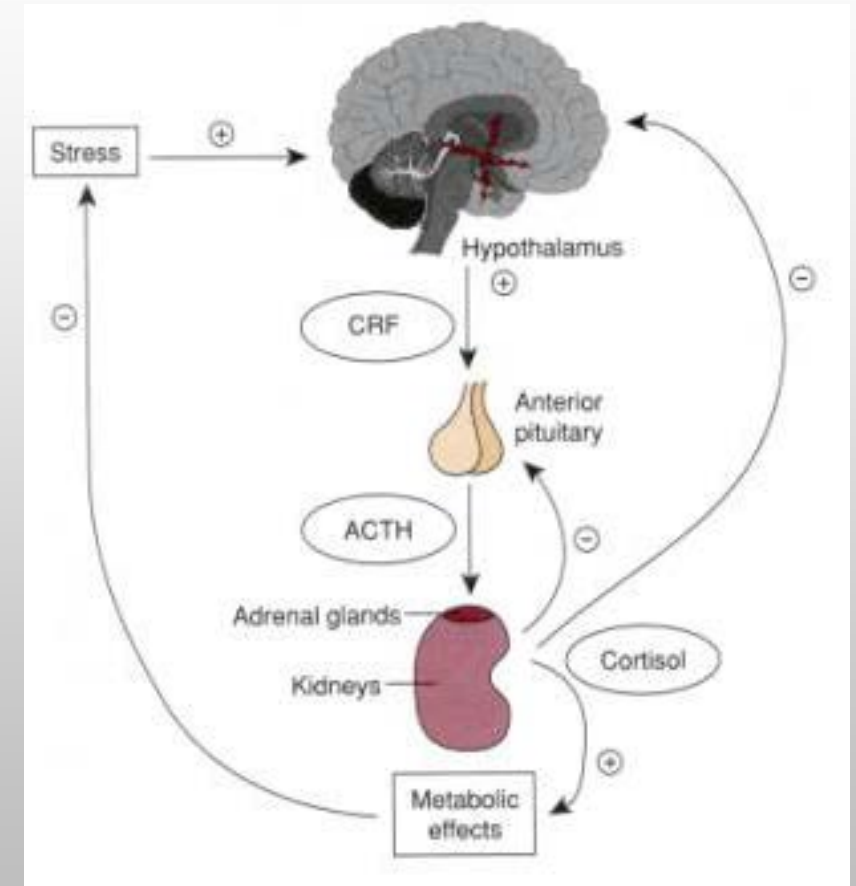


*"My advice is to learn all the tricks
you can while you're young."*

EFFECTS OF MATERNAL STRESS DURING PRENATAL PERIOD

- FETAL DEVELOPMENT
- EFFECTS OF STRESS
 - ↑ CORTISOL
 - CHANGES 'SET POINT' HPA AXIS

How can we accurately assess and address dam welfare in kennels?



SOCIALIZATION

- GRADUAL, CONTROLLED EXPOSURE TO VARIOUS ENVIRONMENTAL STIMULI
 - TEACHES APPROPRIATE BEHAVIORAL RESPONSES, SOCIAL SKILLS AND POSITIVE EXPERIENCES



Ideally requires introduction to as many different people, things, animals, places, and experiences as possible

SOCIALIZATION AND BEHAVIORAL WELLNESS

Well socialized dogs are less likely to be fearful, aggressive or difficult to handle.



ADULT SOCIALIZATION



- OFTEN, FOCUS IS ON PUPPIES
- **ONGOING PROCESS
THROUGHOUT THE DOG'S
ADULT LIFE**

Especially important for breeding animals
intended for re-homing

Enrichment: a critical tool for building on socialization

- **SOCIAL ENVIRONMENT**

- GROUP HOUSING, HUMAN-ANIMAL INTERACTIONS

- **NUTRITIONAL ENVIRONMENT**

- FEEDING METHOD

- **PHYSICAL & SENSORY ENVIRONMENT**

- LANDSCAPING, SPACE, TOYS



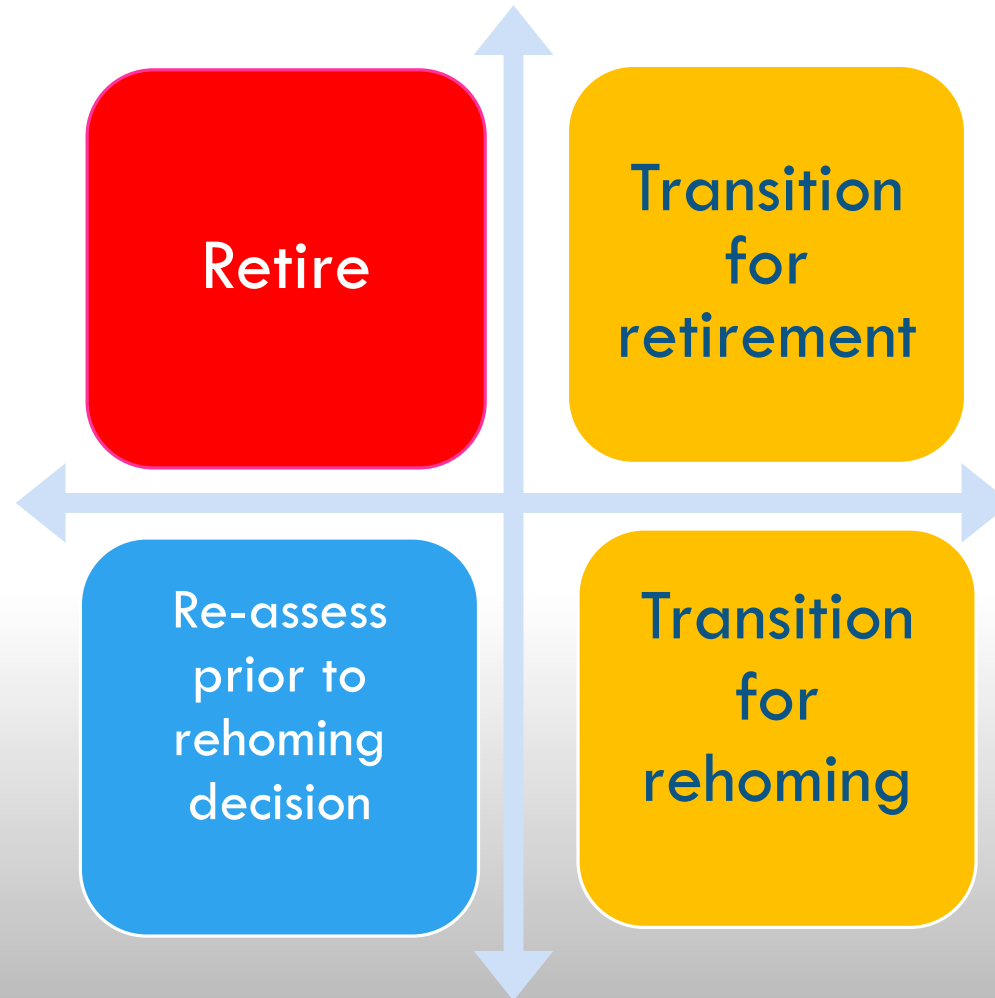
STAGES OF REHOMING PROCESS



SETTING RETIREMENT & REHOMING CRITERIA?

Decision tree needed: triage accordingly

- AGE
- WELFARE STATUS
 - HEALTH
 - GENETIC ISSUES
 - BEHAVIOR



Where will dogs be retired?



Previous history of the dog



**What level of care can
be provided?**



Factors to consider

What training and transitioning is needed?

SPECIAL NEEDS OF RETIRED BREEDING DOGS



- Physical health monitoring
- Behavioral support
- One on one caretaker interactions
- Secure resting area
- Positive, reward-based training
 - All aversive techniques caused aggression in some dogs (Luescher, 2016)



TRANSITIONING TO HOMES

Social facilitation/stress buffering via other dogs

Knowledgeable, prepared rehabilitators and owners



- Low stress handling
- Acclimation to home environment
 - Ideal is to simulate in kennel design

No one-size fits all acclimation period

ASSESSING CANINE WELFARE IN KENNELS















**Development of a canine welfare
assessment tool for use in
kennels**



- **PHYSICAL METRICS** RECORDED (BCS, CLEANLINESS, OTHER HEALTH INDICATORS)

Body Condition Score								
								
								
1=Emaciated	2=Thin	3=Moderate	4=Stout	5=Obese				
Body Cleanliness (% of body covered in debris)								
0%	1-25%	26-50%	51-75%	>76%				
Notes:								
Physical Health (circle as indicated)								
Nasal Discharge	Ocular discharge	Tear staining (L) (mild, moderate, severe) (R mild, moderate, severe)	Sneeze	Cough	Missing fur or poor coat	Wounds, sores or lesions	Lameness	Other

METHODS

Canine welfare
assessment tool
(WAT) developed

Behavior: dogs'
responses to
approach
categorized

Fight or flight
Frozen
Stereotypic

Ambivalent

Affiliative, Attention-
soliciting, Neutral

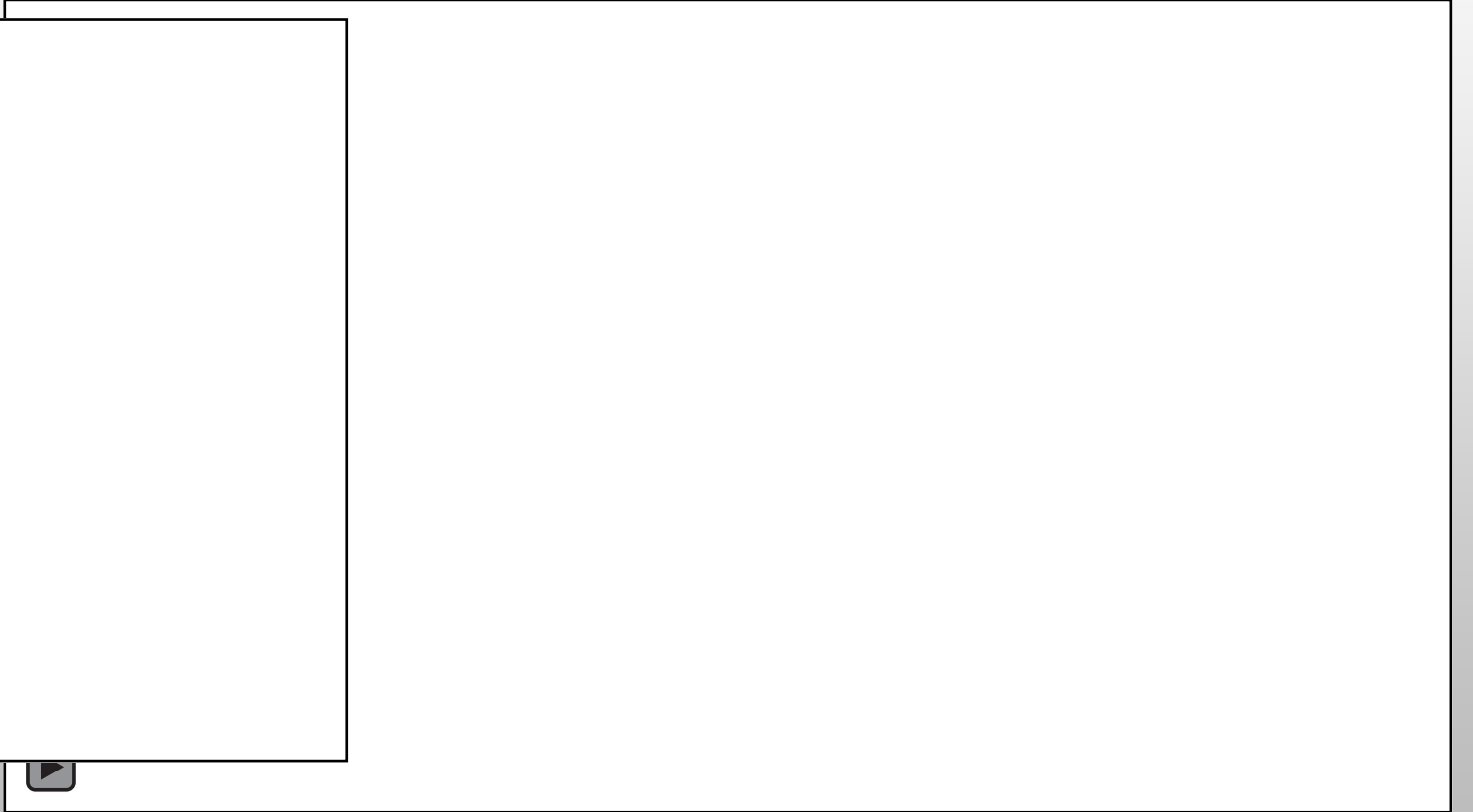
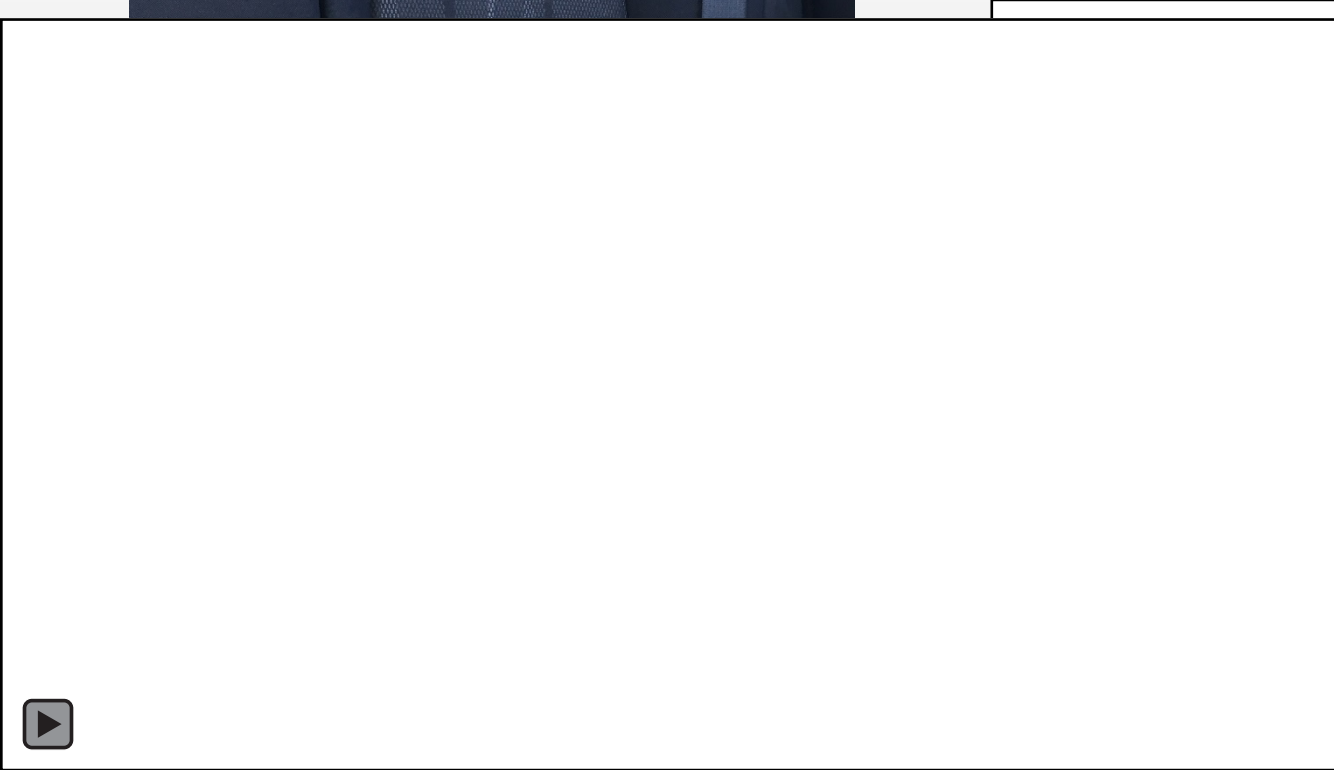


IMPORTANCE OF FEAR ASSESSMENT

- **IF FEARFUL IN FAMILIAR ENVIRONMENT, TRANSITION TO REHOMING LIKELY \Rightarrow DISTRESS**
- **MAY BE INTERPRETED AS POOR PRIOR CARE**
- **MAY COMPLICATE ADOPTION/RETENTION**
- **MAIN REASONS FOR ADOPTION:**
 - **APPEARANCE, SOCIAL BEHAVIOR WITH ADOPTER, PERSONALITY**

Weiss et al. 2012. Animals, 2(2), 144-159

RECOGNIZING FEAR AND DISTRESS



counter-intuitive



WHAT CAN A BREEDER DO?

- EVALUATE EARLY AND OFTEN (FAMILIAR AND UNFAMILIAR PERSON)
- EVALUATE IN DIFFERENT PLACES (NOT JUST HOME PEN)
- EVALUATE GENETIC SELECTION
- REVISIT SOCIALIZATION, ENRICHMENT AND CARETAKER INTERACTIONS; MODIFY AS NEEDED



EXAMPLES







WHAT ABOUT EUTHANASIA?



Euthanasia decisions
*Should not be made on
basis of convenience*

- ESTABLISH CRITERIA
 - SEVERE, POOR PROGNOSIS PHYSICAL OR BEHAVIORAL HEALTH ISSUES THAT RESULT IN ONGOING POOR QUALITY OF LIFE
 - E.G., DANGEROUS BEHAVIOR

TAKE HOME MESSAGES

- **SUCCESSFUL RETIREMENT & REHOMING IS DIFFICULT**
 - REQUIRES PLANNING AND COLLABORATION
- **SET DOGS UP FOR SUCCESS EARLY**
- **ASSESS DOGS EARLY AND OFTEN USING CRITERIA FOR BOTH RETIREMENT AND REHOMING**
- **FEAR IS THE ENEMY OF SUCCESSFUL REHOMING**
 - ADDRESS IN SELECTION & MANAGEMENT

ACKNOWLEDGEMENTS

• RESEARCH TEAM

- JUDITH STELLA
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- MIKAYLA SMALL
- JAMES HA

COLLABORATING DOG BREEDERS



SPONSORS



THE STANTON FOUNDATION



SPECIAL THANKS





QUESTIONS?

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WHAT DID THE ASSESSMENT TELL US?

- NO MAJOR HEALTH PROBLEMS
- BUT SOME FEAR OF STRANGERS
PRESENT



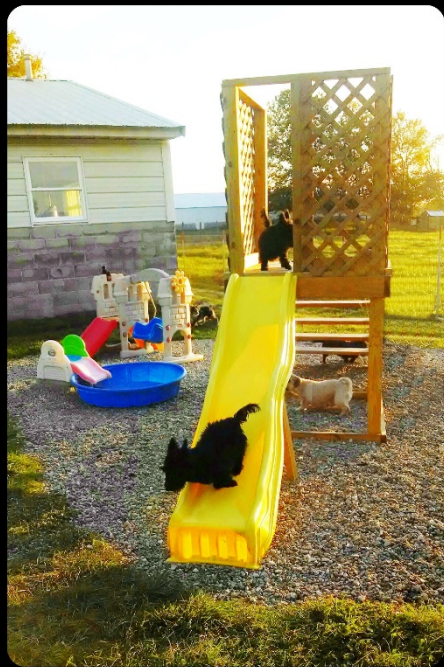
REHOMING CONSIDERATIONS

- **OWNER SATISFACTION**

- BEHAVIORAL PROBLEMS ARE POORLY TOLERATED
- IMPACTS ON ADOPTION, RETENTION, EUTHANASIA
- LEADING CAUSE OF RELINQUISHMENT TO SHELTER (SHELTER PET AL., 2002)
- RISK TO BREEDER REPUTATION

- **WELFARE OF DOGS AT ALL STAGES OF TRANSITION**





CANINE WELFARE ASSESSMENT TOOL APPLICATIONS

Identify fearfulness
upon approach

Facilitate
interventions

Improve adoptability
and retention

Applicable to multiple
“field” settings



QUESTIONS?



MEASURES OF FUNCTIONING WELL: APPLICATIONS TO DOGS

- STRESS HORMONE LEVELS
- INDICATORS OF IMMUNE FUNCTION (WBC/RBC)
- OTHER INDICATORS
 - RESPIRATION RATE
 - HEART RATE
 - BODY TEMPERATURE



- **HEALTH**
 - DISEASE, INJURY, MORTALITY RATES
- **GENERAL APPEARANCE**
- **BODY CONDITION**
- REPRODUCTIVE SUCCESS
 - **LITTER SIZE AND QUALITY**
- PERFORMANCE/PRODUCTION

MEASURES OF FEELING WELL: BEHAVIORAL METRICS

Normal behaviors

- Maintenance (e.g., grooming, conflict, social

Abnormal behaviors

- Excessive/unpredictable aggression
- Apathy/unresponsiveness; hyper-responsiveness
- Excessive grooming/lack of grooming
- Behavioral vices/stereotypies



MEASURES OF NATURAL LIVING

What elements of the dog's living conditions are both natural (species-specific) and preferred?

What can **reasonably** be accommodated?

- Group living
- Access to outdoors/natural surfaces
- Exercise
- Clean, dry, comfortable resting areas
- Quiet, separate whelping/nursing quarters



INDICATORS OF BEHAVIORAL STATE



INDICATORS OF BEHAVIORAL STATE



IMPLEMENTING A RETIREMENT PLAN

**Assess dog in
different areas
of facility**

**Identify
retirement
location**

**Determine if
candidate for
rehoming**

**Assume dogs
will need
social support**

**Pair-adoptions
where feasible**

- Dogs should be stable, familiar and compatible

THREE CONCEPTIONS OF ANIMAL WELFARE

(FRASER ET AL., 1997)

ANIMALS SHOULD:

Function well

Good health

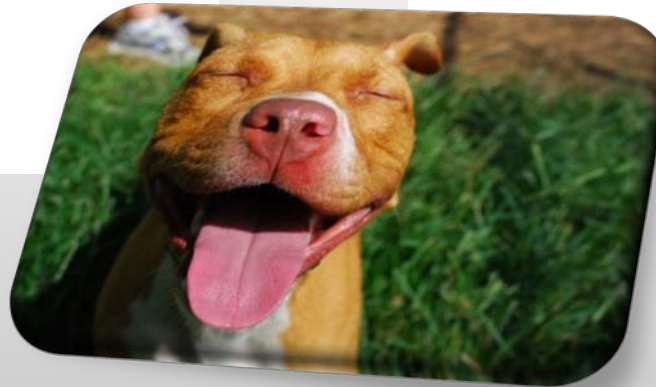
Normal growth, reproduction



Feel well

Minimize negative feelings (pain, fear)

Experience positive feelings (contentment)



Be able to lead reasonably natural lives

Perform behaviors that are important to them

Have natural elements in their living spaces

ASSESSING BEHAVIORAL RISKS IN REHOMING CANDIDATES

- WHAT % OF DOGS IN BREEDING KENNELS ARE LOW RISK FOR TRANSITION PROBLEMS DURING REHOMING?
 - FEAR ASSESSMENT
- WHAT MANAGEMENT PRACTICES MAY BE ASSOCIATED WITH LOW RISK IN COMMERCIAL BREEDING KENNELS?
- WHAT INTERVENTIONS ARE BEST?

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THANK YOU!

