

# IMPACTS OF DROUGHT ON WILDLIFE 2013

Ed Jahrke

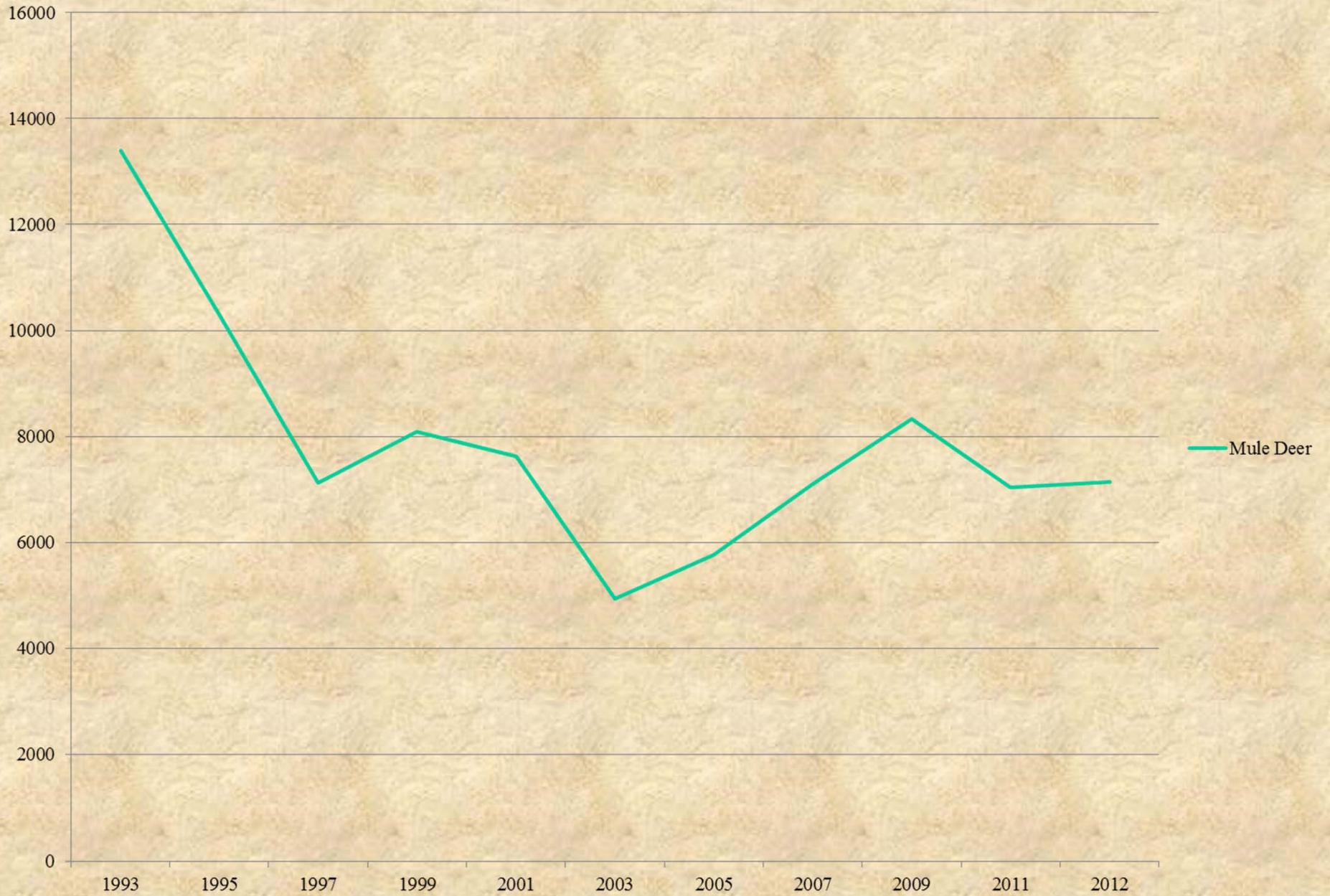
Wildlife Specialist Statewide Supervisor



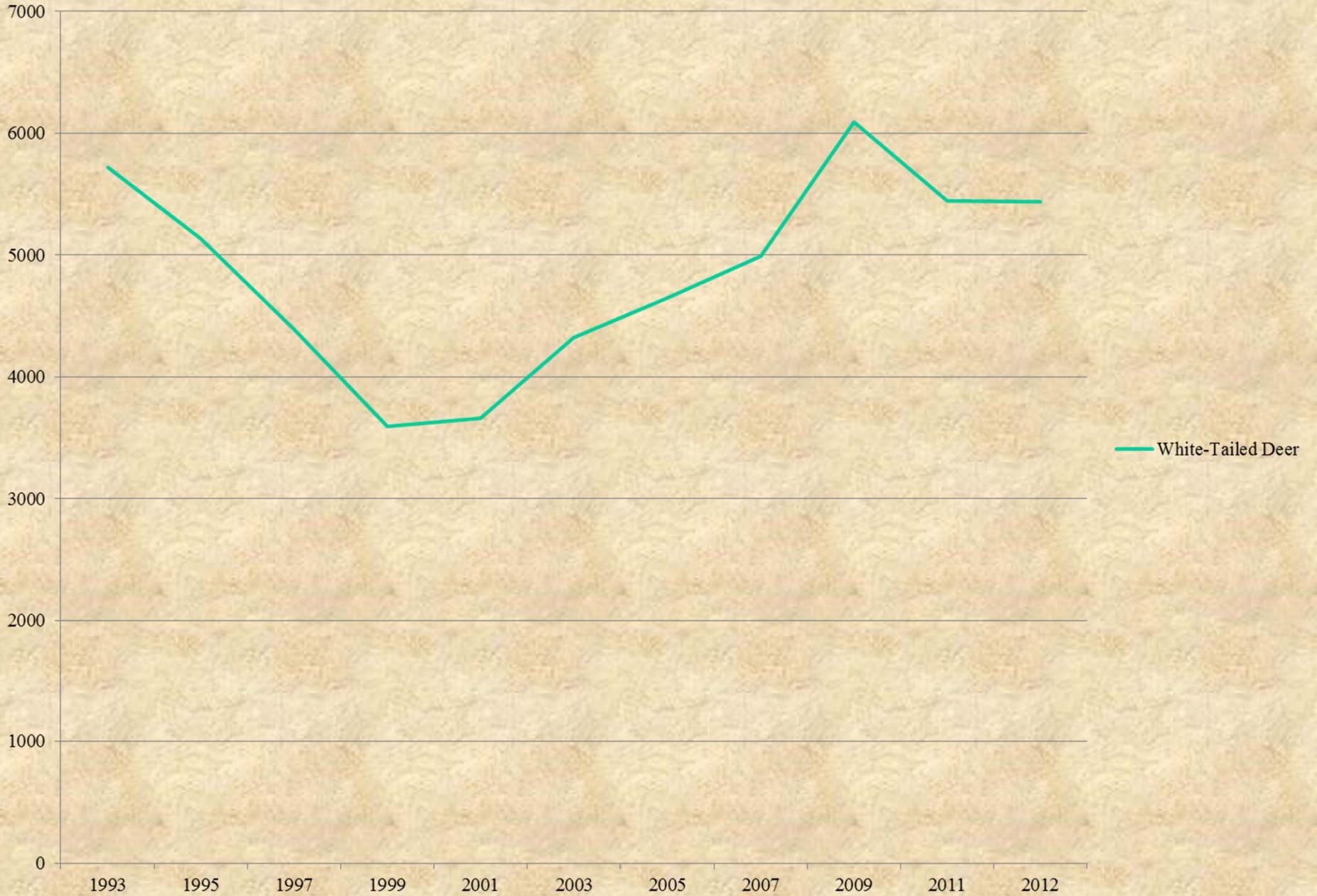
# Impacts at a Glance

- Habitat for wildlife is food, water, cover, and useable space
- Drought causes poorer habitat conditions
- Lower habitat quality leads to increased mortality through starvation, predation, reduced production and recruitment (fewer young survive)
- Continued drought accelerates negative impacts to all wildlife populations because habitat gets worse
- Impacts tend to be cumulative = fewer critters

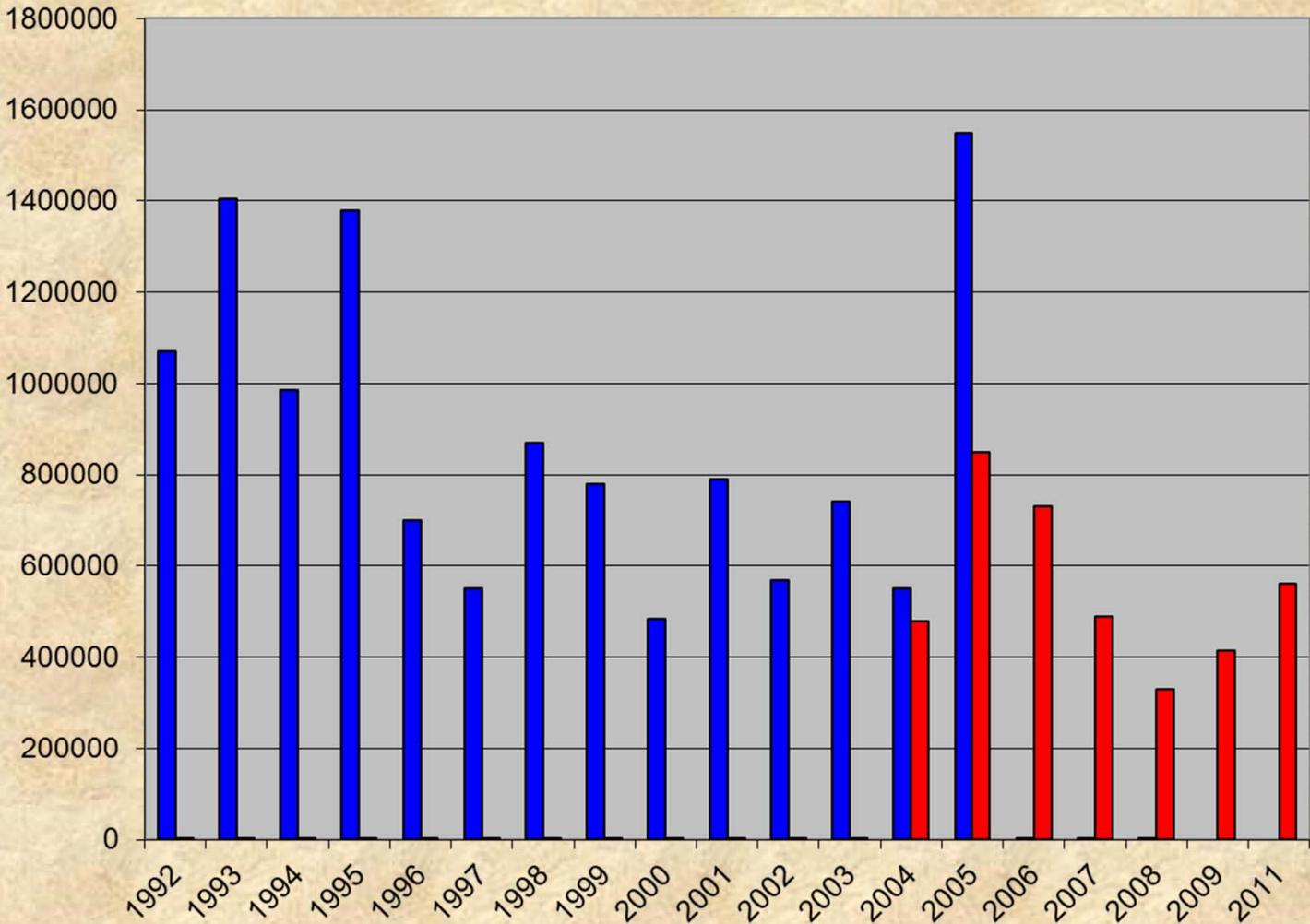
# Mule Deer Harvest



# White-Tailed Deer Harvest



# Gambel's and Scaled Quail Harvest



■ Old Questionnaire  
■ New Questionnaire

Year 1991 - 2008

# Impacts to all Wildlife

- Similarities exist regarding impacts to game and nongame, terrestrial and aquatic, predators and prey
- Sensitive species (T&E, others) are greatly impacted by long-term drought since this represents another major limitation to population increase
- Some species of fish, birds, mammals, reptiles, and amphibians have lost crucial habitats as a direct or indirect result of long-term drought.
- Drought tends to concentrate wildlife, making them much more susceptible to disease and predation
- Drought + Habitat Fragmentation = reduced wildlife populations and increased challenges for Wildlife Agencies

# Economic Impacts of Declining Wildlife

- Loss of direct and indirect \$ for local Arizona communities from hunters and non-hunters alike
- Reductions in customer outlay for sporting goods, etc.
- Fewer Federal \$ for Wildlife Management
- Represents a direct loss to Arizona Game and Fish Department in license revenues
- Times of poor habitat quality require increased management actions from AGFD and others, despite reduced \$

# Increased Management Actions

- During periods of low wildlife abundance, survey efforts must increase
- More effort and \$ for population maintenance
- Water catchment maintenance/water hauling costs increase
- Habitat maintenance costs increase
- Many species move into town in search of water and food
- ‘Nuisance’ wildlife calls increase as human-wildlife conflicts in urban settings increase

# Water Developments and Water Management



# Water Hauling Data

- 1996 and 2002 – AGFD hauled approximately 1.4 million gallons of water
- A typical year sees approximately 400,000 gallons of water hauled to wildlife
- 2008 – AGFD SSDV hauled 173,200 gallons.
- 2009 – AGFD SSDV hauled 214,000 gallons.
- 2010 – AGFD SSDV hauled 311,000 gallons
- 2011 – AGFD SSDV hauled 308,160 gallons
- 2012 – AGFD SSDV hauled 295,100 gallons

















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Questions?

