

Lower Colorado River



Multi-Species Conservation Program

Balancing Resource Needs

Beal-USFWS & 'Ahakhav-CRIT Riparian Restoration



Beal Riparian Monitoring

- Habitat monitoring
- Microclimate monitoring
- Southwestern willow flycatcher surveys
- Avian monitoring
- Bat monitoring
- Small mammal monitoring
- Insect monitoring

Beal Riparian Restoration Site

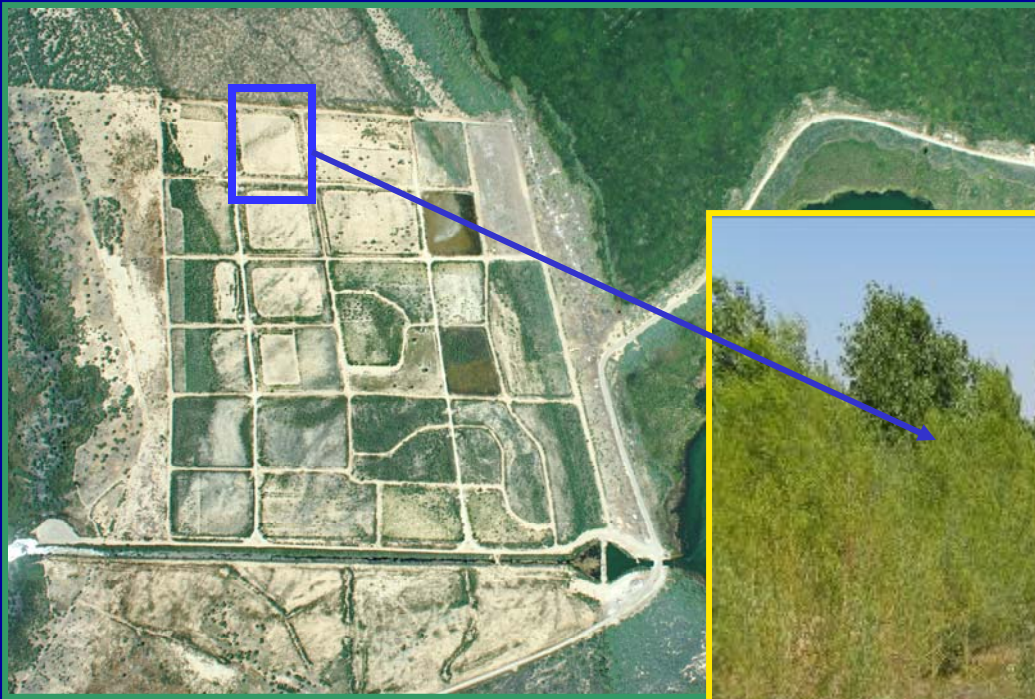


2003



2008

Perimeter Planted Fields



Mixed CW III-IV, Seed & Rooted Nursery Stock



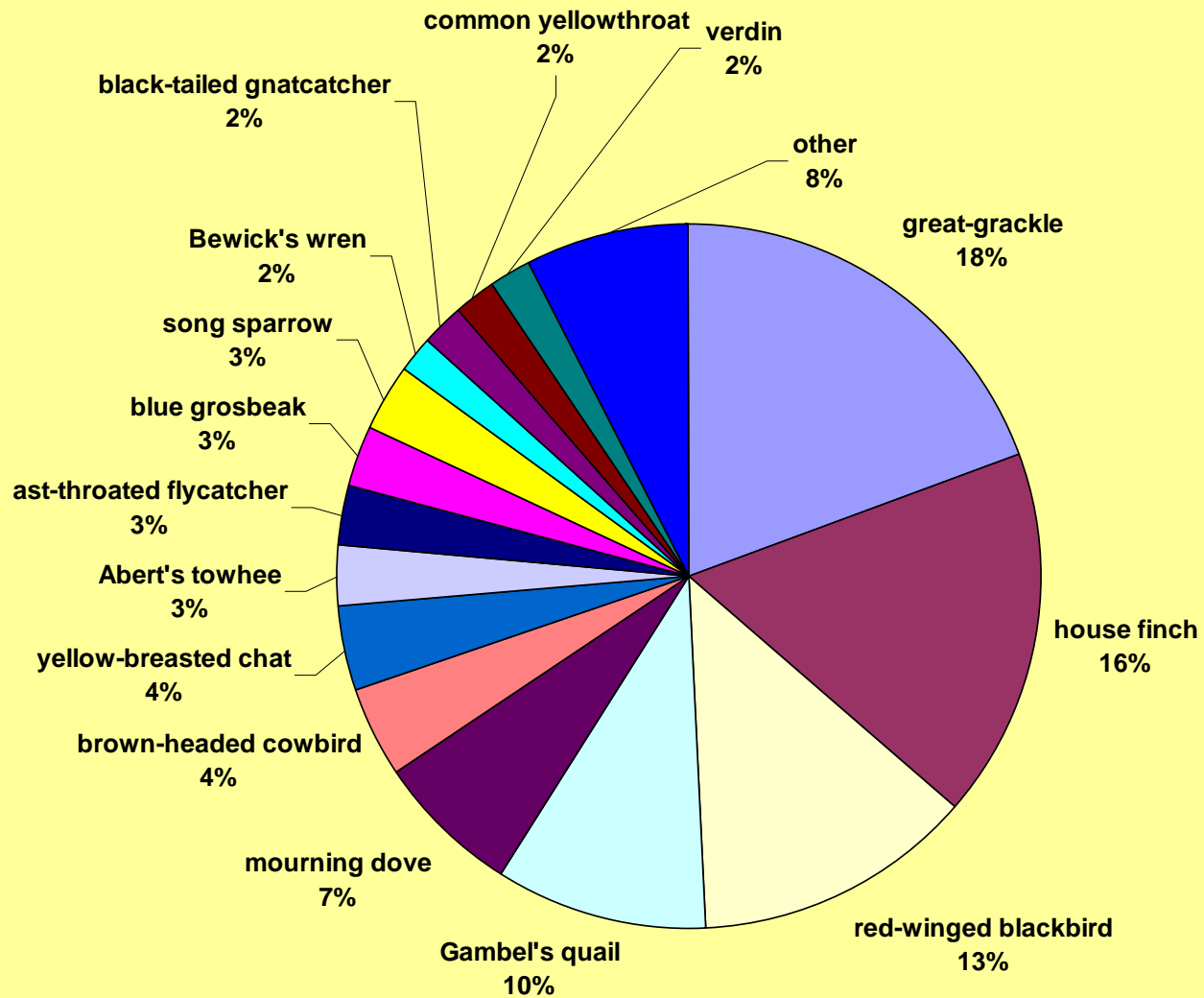
Habitat Monitoring

- Five permanent monitoring plots were established.
- Shrub density ranged from 1,273 shrubs/ha to 155,000 shrubs/ha
- Tree density ranged from 1,400 trees/ha to 3,537/ha.
- Overstory canopy cover ranged from 33 to 91%.
- Species Present: Bermuda grass, arrow weed, salt cedar, screwbean mesquite, Fremont cottonwood, honey mesquite, baccharis species, Russian thistle, dead stems, coyote willow, Gooding's willow

Avian LCR MSCP Covered Species

- Two migratory willow flycatchers observed.
- One yellow-billed cuckoo was detected.
- Bell's vireo and yellow warbler were detected breeding at the Project





LCR MSCP Covered and Evaluation Species Mammals

- One cotton rat (*Sigmodon spp.*) was captured in 2006
- Western red bat (0.19% relative bat activity)
- Western yellow bat (0.10% relative bat activity)
- Townsend's big-eared bat
- California leaf-nosed bat (0.57% relative bat activity)



Small Mammal Monitoring

- 575 traps were set out with 81 individuals captured comprising 7 species
- Species captured- cactus mouse, deer mouse, desert pocket mouse, Merriam's kangaroo rat, house mouse, white-throated woodrat, desert cottontail



Bat monitoring

- 10 species and 4 species groups observed
- Most abundant species western pipistrelle
- Most abundant species groups 25-30 Khz and 45-55 Khz

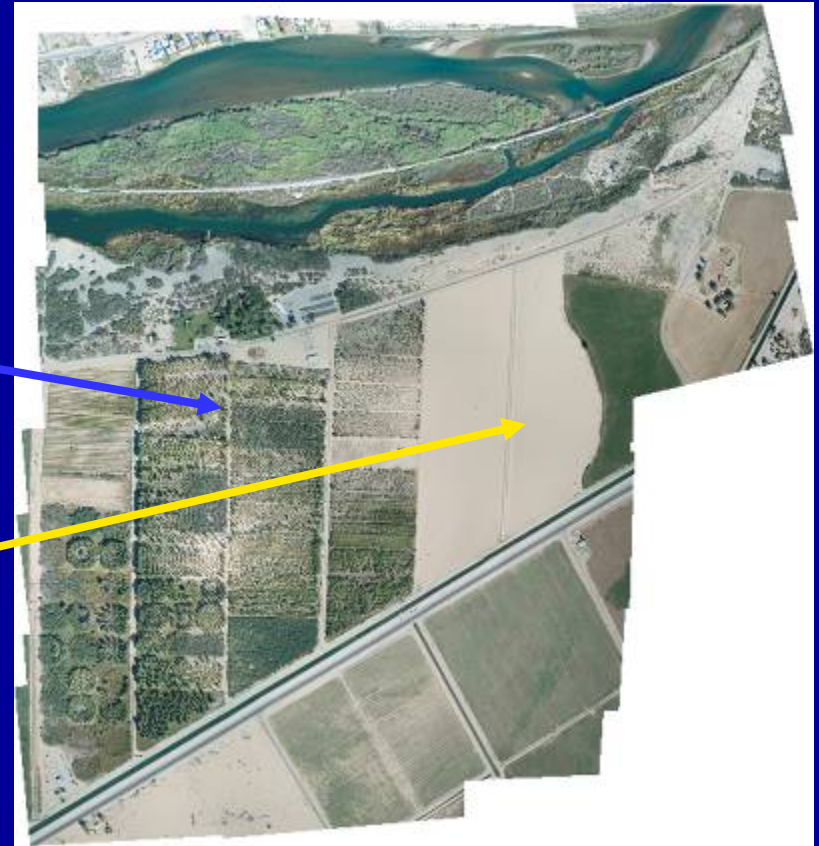
CRIT 9 Monitoring

- Habitat monitoring
- Microclimate monitoring
- Southwestern willow flycatcher surveys
- Yellow-billed cuckoo surveys
- Avian monitoring
- Bat mist netting

'Ahakhav Tribal Preserve Colorado River Indian Tribes



2001



CRIT 9



Feb 2007, Pole Planting



May 2007

Moist Habitat + Dense Vegetation August 2007



Pools Installed Dec 2006

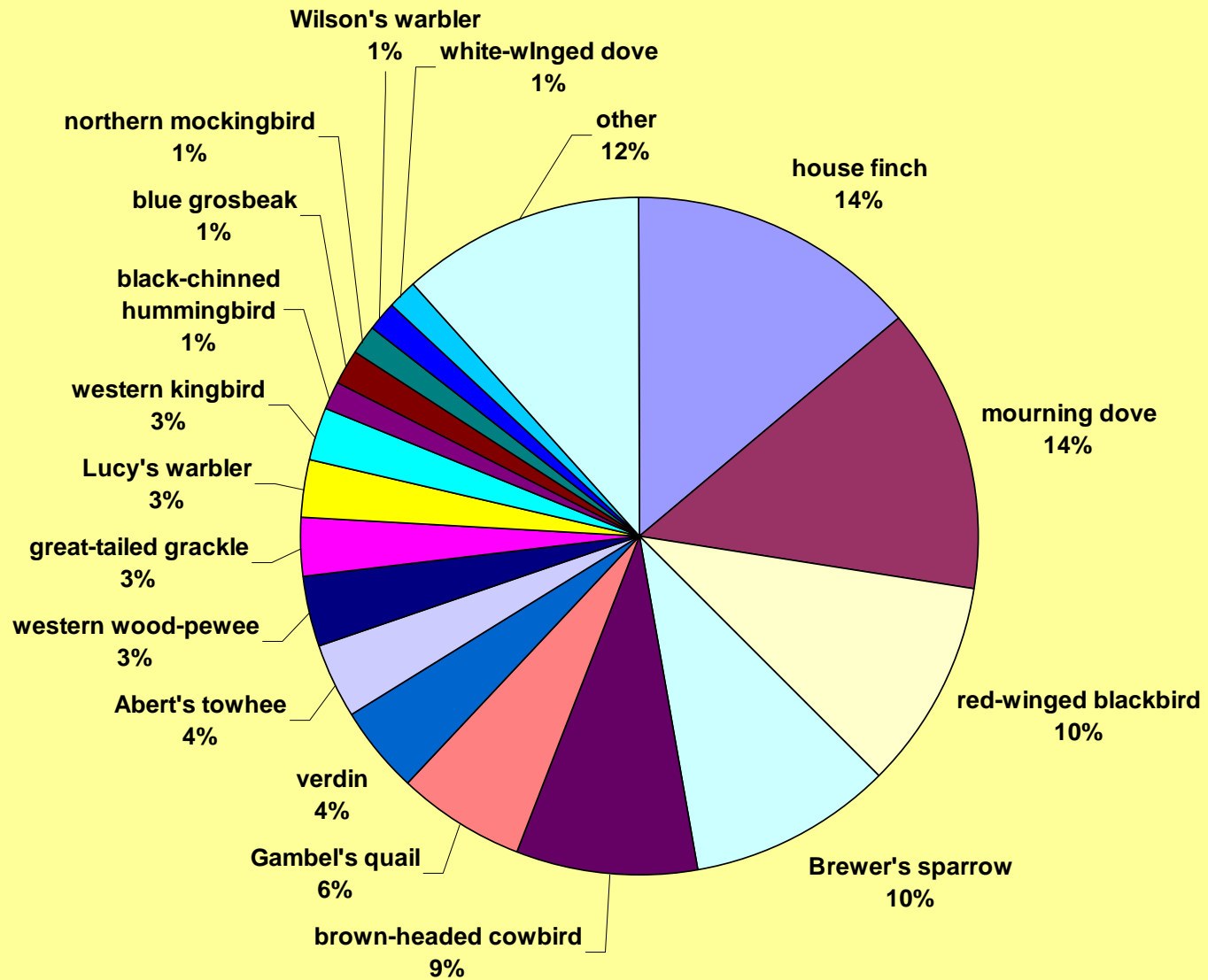
Habitat Monitoring

- Four permanent monitoring plots established
- Shrub density ranged from 0 shrubs/ha to 95 shrubs/ha
- Tree density ranged from 286 trees/ha to 512 trees/ha
- Overstory canopy cover ranged from 49 to 71%
- Species present-Fremont cottonwood, sandbur, Gooding's willow, Bermuda grass, aster, screwbean mesquite, honey mesquite, coyote willow, baccharis species

Avian LCR MSCP Covered Species

- One migratory willow flycatcher
- One migratory yellow-billed cuckoo
- Vermilion flycatcher detected breeding





Bat mist netting

- 2 nights in September
- Twenty six bats comprising seven species captured
- Four western yellow bats
- One California leaf-nosed bats

