

The Joys, Challenges and Oddities of Housing a Family Group of Green-Naped Pheasant Pigeons at the National Aviary

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General Information

- *Otidiphaps nobilis*
- Family: Columbidae (Pigeons, Doves)
- IUCN Red List - Least Concern
- Range: New Guinea (primarily Rainforest)
- Does not act 100% like a pigeon or a pheasant
- Filled the niche of ground bird

General Information

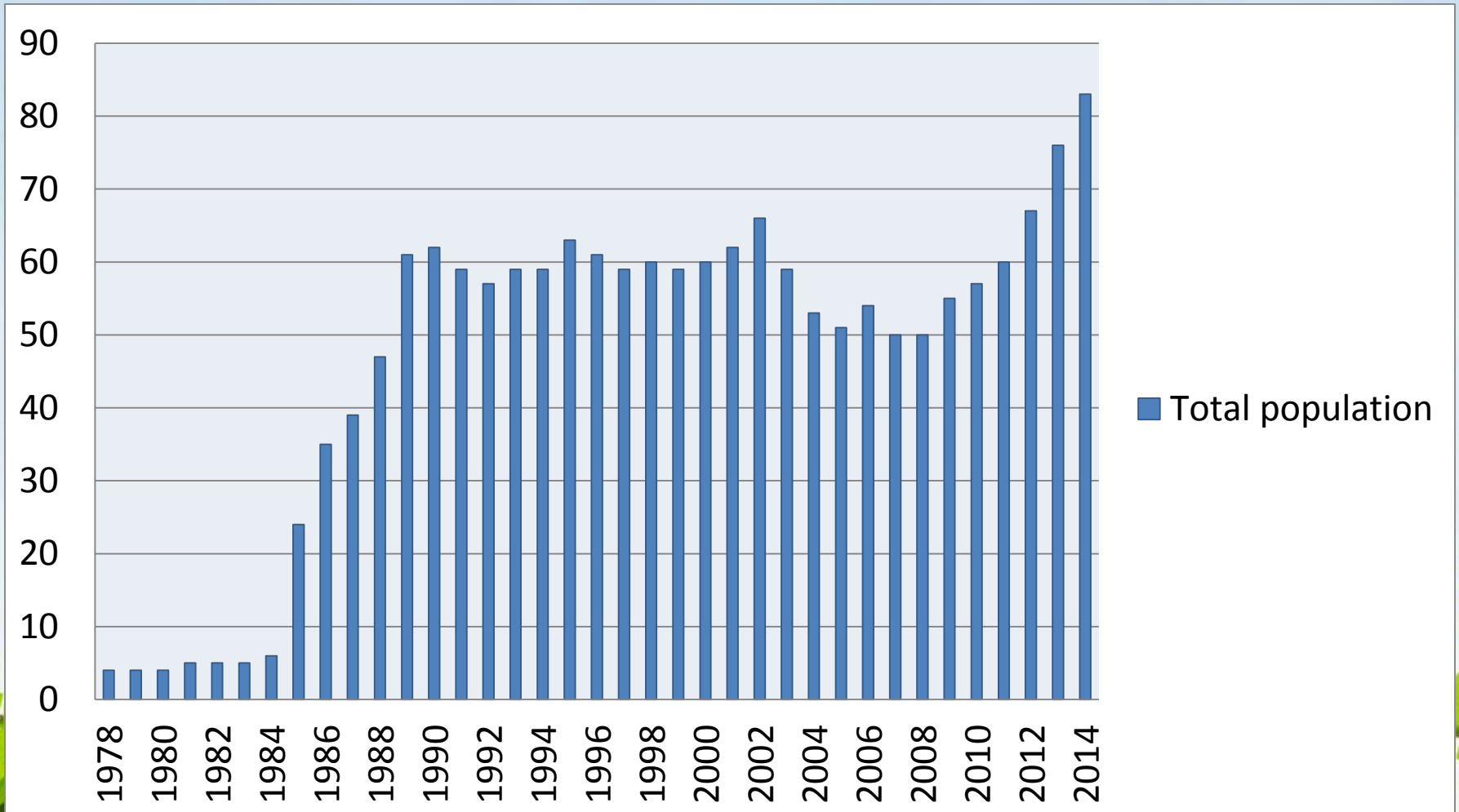
- Diet: Seeds and fallen fruits
 - Bird of Prey, after a chick hatched
 - Normally eats bugs
- Nest: Loose platform of slender sticks
- Clutch: One egg
- Incubation: 23-26 days
- Fledge: aprx 35 days
- Roost in the trees



Captive Population

- Yellow SSP
- Artificially incubated and hand-reared
- Foster-rearing success
- Increase in success with parent-rearing
- Hand-rearing is rarely needed
- SSP population : just over 80 birds

Population Growth



Tropical Forest

- Tropical Forest: 11 years
- Raised a single chick
- Cross-fostered by Nicobar Pigeons
- Eight additional chicks hatched none survived
- Several different ground species:
 - Great Argus Pheasant
 - Guam Rail
 - Victoria Crowned Pigeon
- Ground space is close to public
- Exhibit is very damp

Tropical Forest



Wetlands

- Wetlands: 2012 – current
- Successfully hatched 3 chicks six months
- Ground space is farther from public
- Fewer ground species in exhibit
- Success at dry nest sites
- Chicks did hatch at wet nest sites

Wetlands



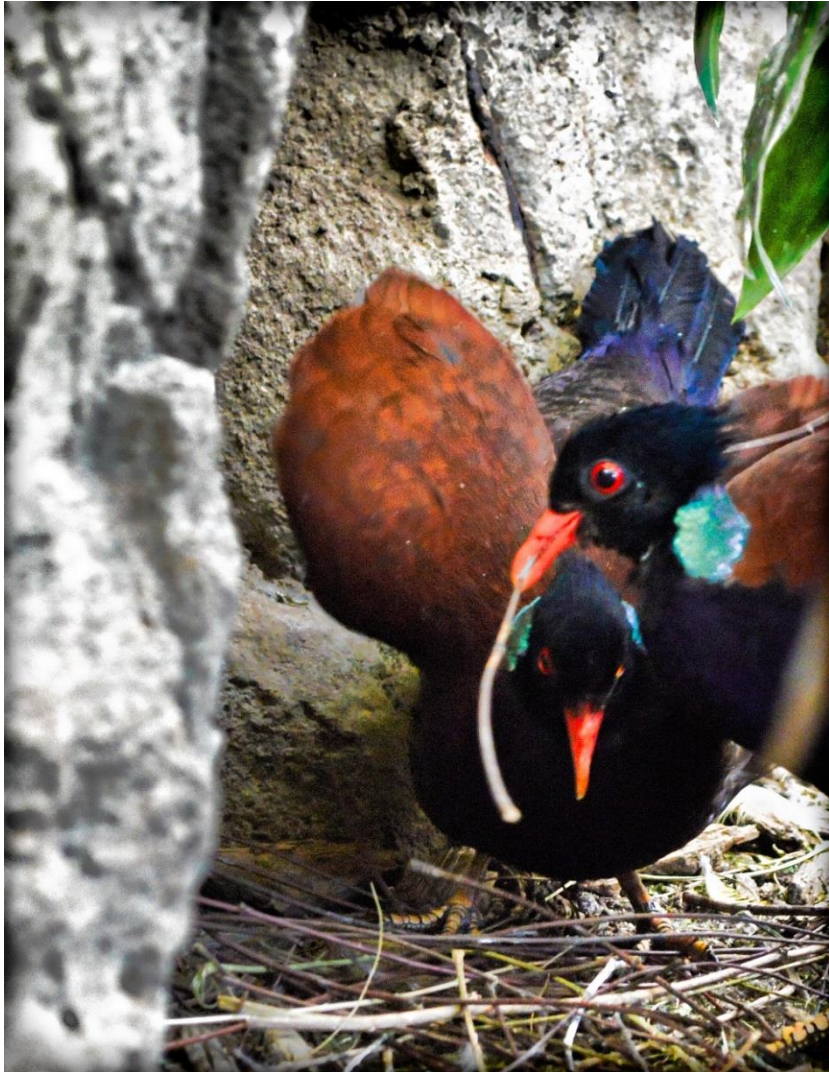
Wetlands

- Currently houses 37 species of birds
- 130 individual birds
- Pond: 15,000 gallons
 - Filtration and ozone systems in place
- Exhibit is 100 ft by 65 ft
- Ground space is relatively small

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Nest Building



- Prefers corners or curves
- Loosely built platform
- Male incubates during day
- Female incubates at night



Nest sites

- 3 nest locations used in the Wetlands

Nest 1- Very Dry
No traffic
1 Chick raised



Nest 2 – Dry
Some traffic
2 chicks raised



Nest 3- Very wet
High traffic
NO SUCCESS



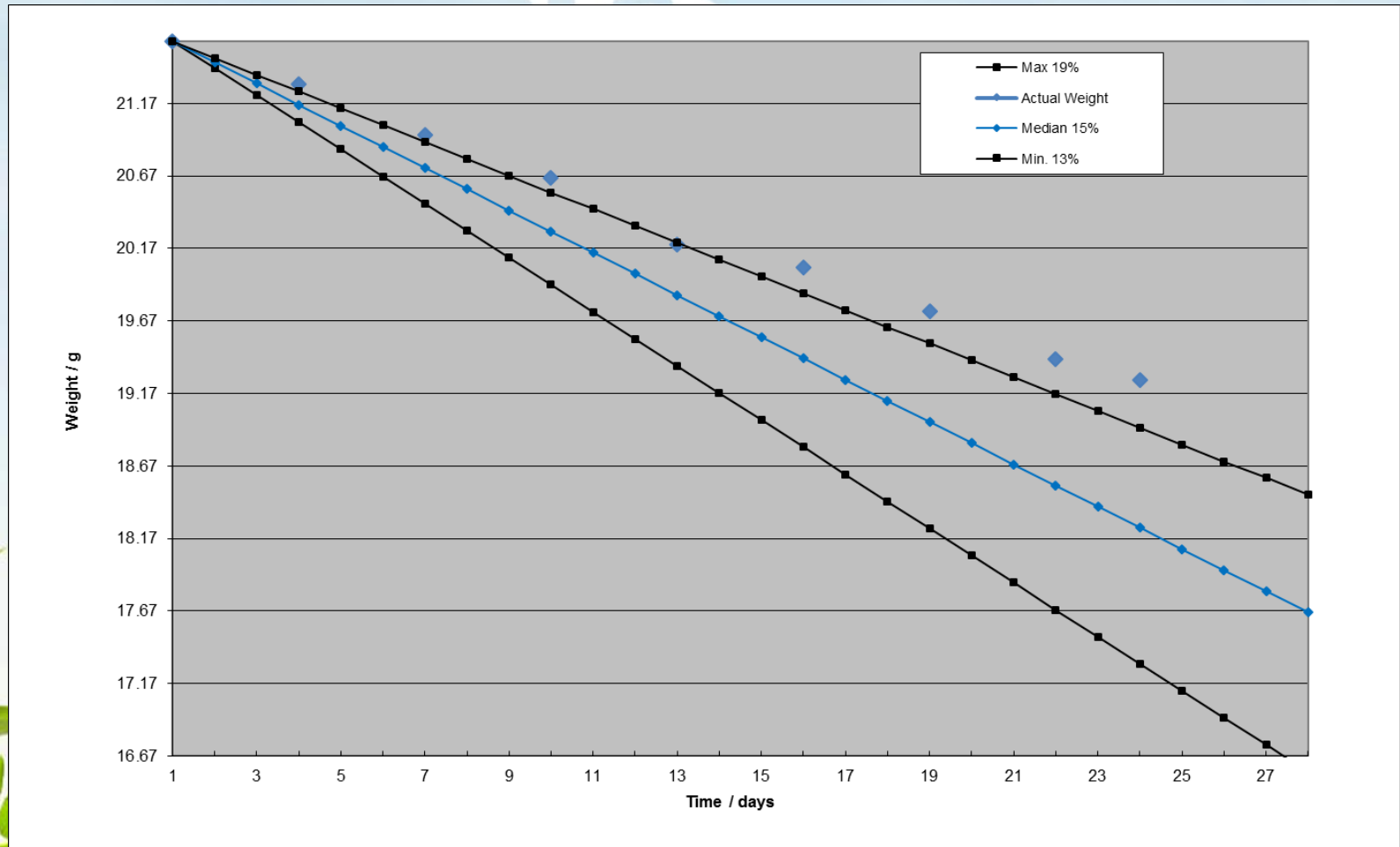
Egg Weights

Weighed every three days to minimize interference with incubation



Egg Weights

- Weight lost min, max and median based off hand rearing recommendations





Day 3:
Able to see
heartbeat



Day 22:
Egg very
crowded; air
cell is large



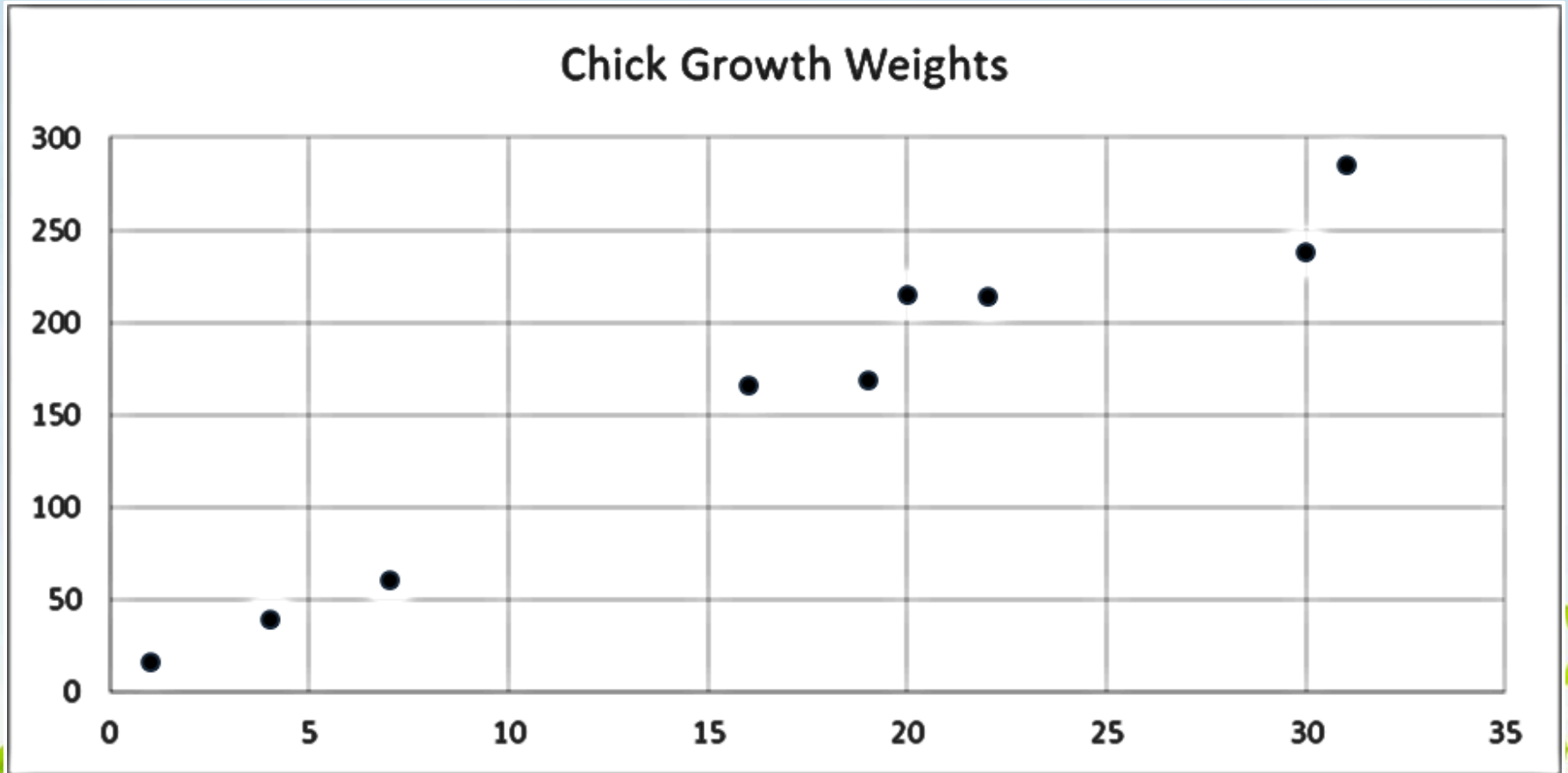
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Egg Weights



- Graph is set with a 23 day incubation
- Our weights fall outside the guidelines when compared to the general weight loss trend
- Egg mass loss similar to artificial incubation

Parent-Reared Chick Weights



As suspected the weights were higher than hand reared weights.

Chick Development

Day 0 – Day 4

- Eyes opening
- Head held up



Chick Development

By Day 14

- Chick is typically alone in nest
- Mobility is low
- Feather sexing and banding



Chick Development

Day 21 – Day 28

- Great mobility
- Parents still feeding
- Chick sleeps in nest
- Adults roost in trees
- Adult feathers obvious



Chick Development

By Day 33

- Chick no longer in nest
- Roosting in trees at night
- Eating on own
- Fully feathered



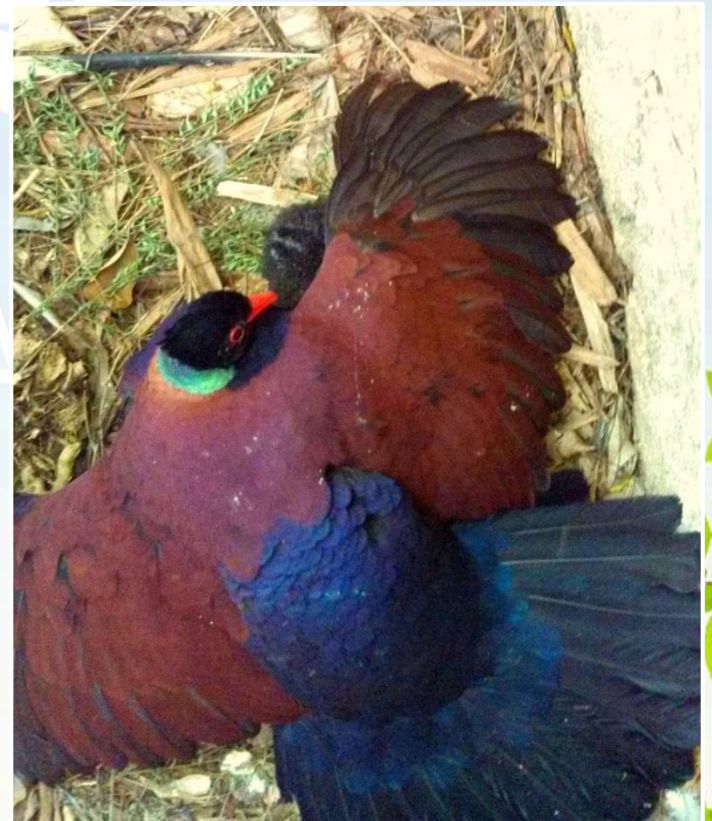
Family Group

- 5 Pheasant Pigeons in exhibit
 - 3 males 2 females
- Parents re-clutched quickly
- Juveniles allowed near nest
- No sibling care
- Juveniles seen chasing each other



Aggression Toward Nestling

- Juvenile female was picking on nestling
- Nestling had scrapes and cuts to its head and back
- Juvenile female placed in a howdy
- No further injury to nestling
- Juvenile female showed interest in nesting



2 Females, 2 Eggs, 1 Nest

- Juvenile female reached 1 year old, she started to lay eggs
- Juvenile female laid egg in the same nest as her dam
- It appeared in nest about 1 week after the adults



Other Oddities

- All three birds incubated both eggs
- Young female present at nest with sire
- Eggs were not allowed to develop past fertility check
- Neither young males was sexually active



Other Family Groups

- One other family group has been kept together in the SSP population
- This young female also had fertile eggs with her sire, but nested in a different location
- Both of these cases demonstrate that it is possible to manage a family group

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Future Management

- More ground birds have been added to the exhibit:
 - Masked Lapwing
 - Palawan Peacock Pheasant
 - Various waterfowl
- Nesting space may be limited
- Wet and dry seasons
- Increase in the availability insects in the room
- Second breeding female added (?)



Future for Managing

- With careful management, we can keep offspring with parents for an extended time
- Possibility exists for managing two breeding pairs in one exhibit
- And a very good question: Can one male successfully breed with two females?