Boys in Stripes Grevy's Zebra Bachelor Herd Formation and Management at the Toronto Zoo

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Our current bachelor group: "Jake" (14.5 years), "Obi" (3 years), "Poe" (1.5 years)



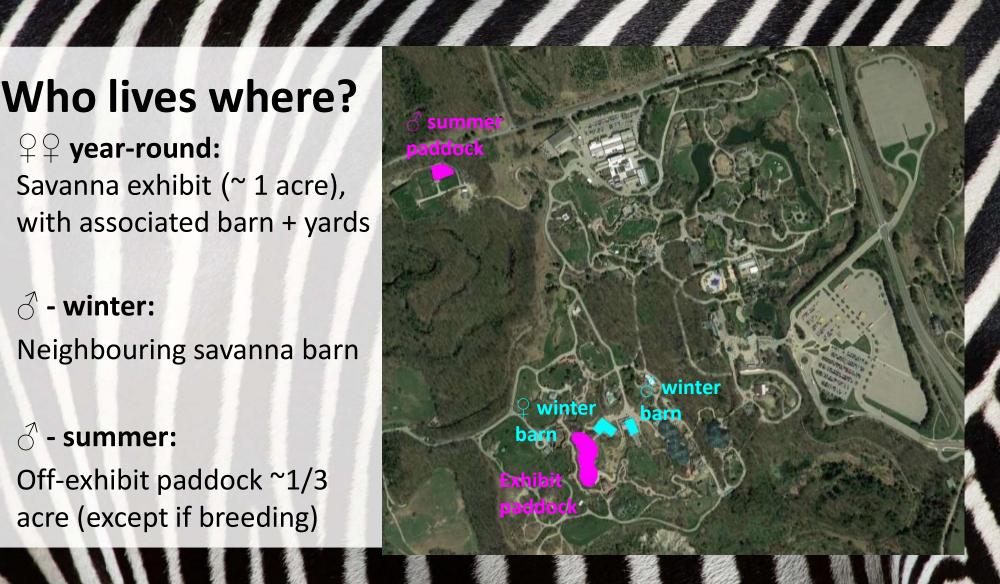
Even though two are still young, it has not always been smooth sailing

Who lives where?

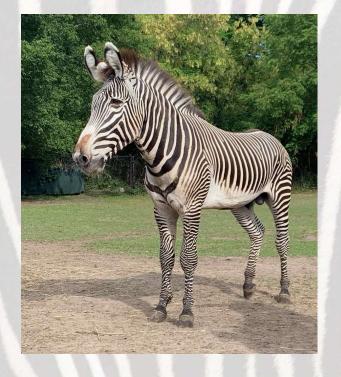
 \bigcirc **year-round**: Savanna exhibit (~ 1 acre), with associated barn + yards

 \mathcal{J} - winter: Neighbouring savanna barn

3 - summer: Off-exhibit paddock ~1/3 acre (except if breeding)



An unusual bachelor herd beginning ... 1.0 Jake needed a friend



- Strong stereotypical behaviours when housed by himself
- Bachelor herd was proposed to improve his quality of life
- In line with behavioural biology of species

Bachelor dyad

- Jake + 1.0 Obi born Feb 2019
- Introduced 2.1 on exhibit during breeding introductions
- Then separated the two males off for the winter without incident
- Aggression in spring, but resolved when moved to summer paddock



And they lived happily ever after ...



... and then came 1.0 Poe, born Dec 1, 2020



 No movement on SSPrecommended transfers

Adding him to the bachelor herd was the logical solution

Step 2: Add Poe to existing group

 Timeline was a balance between age (post-weaning) and season (pre-winter) = late August 2021

- Introduced Poe first to Jake
- After initial chasing was over and 2.0 were settled, add in Obi (third male)
- No issues with Obi bonded quickly with Poe



~ 1 week later ...

Jake ignoring Poe, but really focused on Obi - chasing, mounting, & biting





 Daily photos to document new lacerations and monitor healing

- Regular veterinary checks, but no treatment indicated – felt that wounds would heal if aggression subsided
- Wanted to explore as many options aside from separation with winter approaching

When the going gets tough, turn to the herd!

Population Analysis & Breeding and Transfer Plan

Grevy's Zebra (Equus grevyi) AZA Species Survival Plan[®] Green Program



AZA Species Survival Plan® Coordinator Martha Fischer, Saint Louis Zoo (fischer@stlzoo.org)

AZA Regional Studbook Keeper Katie Pilgram-Kloppe, Saint Louis Zoo (pilgram@stizoo.org)

Adjunct Population Advisor Edward Spevak, Ph.D., Saint Louis Zoo (spevak@stlzoo.org)

15 October 2021

PMC

Population Management Center W LINCOLN PARK ZOD. Animals Always"





- Special thanks to:
- Martha Fischer (St Louis Zoo, SSP Coordinator)
- Curby Simerson (San Diego Zoo)
- Tony Barthel (Smithsonian National Zoo)

Possible triggers, possible solutions

Staff vehicles/feeding anticipation?

 \rightarrow Feed first thing in AM

Resource defense?

→ Free choice hay, nibble nets, multiple feedings per day, no toys left in paddock

Lack of access to holding?

 \rightarrow risks of cornering; only given when supervised

Ultimately, these changes weren't enough



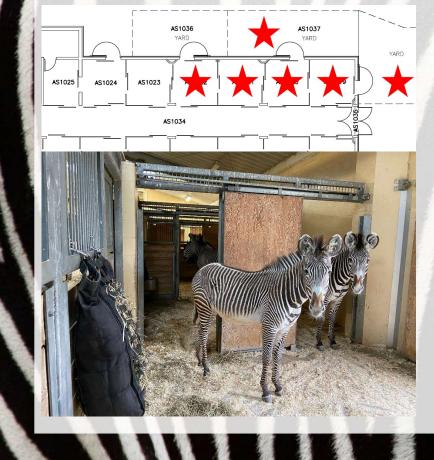
Medication



• Trazodone, an anti-anxiety medication

- Recommended dose in horses is 7.5-10 mg/kg q4-12h.
 - Davis JL, Schirmer J, Medlin E. Pharmacokinetics, pharmacodynamics and clinical use of trazodone and its active metabolite m-chlorophenylpiperazine in the horse. J Vet Pharmacol Ther. 2018 Jun;41(3):393-401. doi: 10.1111/jvp.12477. Epub 2018 Jan 14. PMID: 29333613; PMCID: PMC7167085.
- Prescribed dosage: 3.5mg/kg (= 1,500 mg for Jake) BID
- Within the first day of medication, keepers saw a dramatic change in Jake's behaviour
- Goal: use medication to facilitate herd establishment, continue over move to winter space, then wean off

Winter barn was BETTER for bachelors!



- Jake weaned off of Trazodone (½ dose, 1 week) two weeks after the move
- Stalls (4 total) = more visual barriers
- Less space = less opportunity to get wound up (and fewer reasons for Jake to discipline the "kids")
- Increase in training/keeper interaction
- Enrichment from other species in barn
- Daily separations for toys and high value food items

What does the future hold?



 Plan is to continue the annual move of the boys to the lower paddock for the summer

- Currently working through spring rowdiness
- At 3 years of age, Obi is approaching sexual maturity
- Fingers crossed for transfer recommendations



Questions?

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