



TAG Annual Report Template

Felid TAG Annual Report

Date: 3/1/2024

*** Please note that Annual Reports must be digitally submitted to the AZA Conservation, Management, and Welfare Sciences Department (animalprograms@aza.org) and the TAG's APM Committee Liaison no later than **March 1**

*** Please adjust the tables as necessary to accommodate complete answers.

*** This template is available in a digitized Word form at <https://www.aza.org/resource-documents>

- Please provide a list of the most current TAG Steering Committee members, Advisors and APM liaison. Example:

| NAME | ROLE | INSTITUTION | EMAIL |
|-------------------|------------------------------|--------------------------------------|--|
| Dan Dembiec | Chair (Co-chair) / Treasurer | Memphis Zoo | ddembiec@memphiszoo.org |
| Jason Herrick | Vice-Chair (Co-chair) | Omaha's Henry Doorly Zoo | jason.herrick@omahazoo.com |
| Ivy Brower | Secretary | Zoo Miami | Ivy.Brower@miamidade.gov |
| Jay Tetzloff | SC Member | Blank Park Zoo | jrtetzloff@blankparkzoo.org |
| Craig Saffoe | SC Member | National Zoo | saffoec@si.edu |
| Rebecca McCloskey | SC Member | Denver Zoo | rmccloskey@denverzoo.org |
| Shanna Simpson | SC Member | Topeka Zoo | ssimpson@topekazoo.org |
| Lindsey Vansandt | SC Member | Cincinnati Zoo and Botanical Gardens | lindsey.vansandt@cincinnatiatizoo.org |
| Tara Harris | SC Member | Phoenix Zoo | tharris@phoenixzoo.org |
| Tim Sampson | SC Member | John Ball Zoo | tsampson@jbzoo.org |
| Tyler Boyd | SC Member | Oklahoma City Zoo | tboyd@okczoo.org |
| Stacey Johnson | SC Member | Roger Williams Park Zoo | sjohnson@rwpzoo.org |
| Jilian Fazio | SC Member | Turtle Back Zoo | ifazio@parks.essexcountynj.org |
| Hollie Colahan | SC Member | Birmingham Zoo | hcolahan@birminghamzoo.com |
| Jill Dignan | SC Member | Lincoln Park Zoo | JDignan@lpzoo.org |

- Please list any new or revised statements or guidelines that the TAG has adopted in the past year (note that new or revised Policies, Position Statements, White Papers, and Guidelines must be approved by the AZA Board of Directors). **N/A**

- Please share the date of the upcoming annual check-in meeting with the SSP leadership. Will it be virtual or in person? If in person, will it be in conjunction with a conference or larger meeting? **There will be an in-person check in (virtual for those not in attendance) during the Felid TAG mid-year conference between August 20-24th, 2024. There will also be a virtual check-in at a time not yet determined by the end of May this year.**
- Please attach an updated, Animal Programs Summary Table (See RCP Template Tables 2 and 5)

Sample Animal Programs Summary Table

| Common name (<i>Scientific name</i>) | SSP Designation ¹ | Date of Most Recent B&T Plan | Census Population Size - N (M.F.U) in AZA and Source (e.g. ZIMS Studbook ² , BTP, other) | Number of Participating AZA Member Facilities on census date | Commitment Population Trend (CPT _{DATE}) (Grow, Decline, Stable) or Size (CPS _{DATE}) and date by when it should be achieved ³ | Target Population Size (TPS _{DATE}) and date by when it should be achieved ⁴ | Recent Five-Year Population Growth Rate (λ) and/or Trend (increasing, decreasing, or stable) if growth rate not available, and date span across which it was calculated ⁵ |
|---|------------------------------|------------------------------|---|--|---|---|--|
| Amur Leopard (<i>Panthera pardus orientalis</i>) | Provisional SSP | 6/4/2021 | 71 (32.37) from last breeding and transfer plan | 32 | Grow per 2022 SSP assessment. TBD 11/2024 with new RCP | 100 as established by the last RCP. No target date was designated. TBD 11/2024 | Increasing (2016-2021) per last breeding and transfer plan Growth Rate (λ) = 1.25 |
| Canada lynx (<i>Lynx canadensis</i>) | Signature SSP | 3/7/2023 | 65 (28.37) from last breeding and transfer plan | 26 | Grow per 2022 SSP assessment. TBD 11/2024 with new RCP | 100 as established by the last RCP. No target date was designated. TBD 11/2024 | Increasing (2018-2023) per last breeding and transfer plan Growth Rate (λ) = 1.072 |
| Cheetah (<i>Acinonyx jubatus</i>) | Signature SSP | 2/2/2024 | 333 (171.162) from last breeding and transfer plan | 52 | Maintain or slight decline per 2022 SSP assessment. TBD 11/2024 with new RCP | 325 as established by the last RCP. No target date was designated. TBD 11/2024 | Maintaining/slight decline (2019-2024) per last breeding and transfer plan Growth Rate (λ) = 0.99 |
| Clouded leopard (<i>Neofelis nebulosa</i>) | Signature SSP | 9/14/2021 | 74 (30.44) from last breeding and transfer plan | 27 | Grow per 2022 SSP assessment. TBD 11/2024 with new RCP | 100 as established by the last RCP. No target date was designated. TBD 11/2024 | Increasing (2016-2021) per last breeding and transfer plan Growth Rate (λ) = 1.027 |

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| Jaguar (<i>Panthera onca</i>) | Provisional SSP | 2/10/2022 | 84 (37.47) from last breeding and transfer plan | 46 | Grow per 2022 SSP assessment. TBD 11/2024 with new RCP | 120 as established by the last RCP. No target date was designated. TBD 11/2024 | Decreasing (2017-2022) per last breeding and transfer plan Growth Rate (λ) = 0.976 |
| Lion (<i>Panthera leo</i>) | Signature SSP | 12/6/2022 | 349 (159.190) from last breeding and transfer plan | 96 | Maintain per 2022 SSP assessment. TBD 11/2024 with new RCP | 400 as established by the last RCP. No target date was designated. TBD 11/2024 | Decreasing (2017-2022) per last breeding and transfer plan Growth Rate (λ) = 0.976 |
| Ocelot, (<i>Leopardus pardalis, mitis</i>) | Provisional SSP | 12/13/2022 | 63 (30.33) Generic – 29 (13.16) Brazilian – 34 (17.17) from last breeding and transfer plan | 33 | Grow per 2022 SSP assessment. TBD 11/2024 with new RCP | Generic – 60 Brazilian – 60 as established by the last RCP. No target date was designated. TBD 11/2024 | Decreasing (2017-2022) per last breeding and transfer plan Growth Rate (λ) Generic - 0.926 Brazilian – 0.964 |
| Pallas' Cat (<i>Otocolobus manul</i>) | Signature SSP | 11/15/2021 | 43 (24.19) from last breeding and transfer plan | 17 | Grow per 2022 SSP assessment. TBD 11/2024 with new RCP | 65 as established by the last RCP. No target date was designated. TBD 11/2024 | Increasing (2016-2021) per last breeding and transfer plan Growth Rate (λ) = 1.02 |
| Sand Cat (<i>Felid margarita</i>) | Provisional SSP | 12/10/2021 | 31 (16.15) from last breeding and transfer plan | 16 | Grow per 2022 SSP assessment. TBD 11/2024 with new RCP | 65 as established by the last RCP. No target date was designated. TBD 11/2024 | Increasing (2016-2021) per last breeding and transfer plan Growth Rate (λ) = 1.113 |
| Serval (<i>Leptailurus serval</i>) | Provisional SSP | 1/24/2022 | 77 (37.40) from last breeding and transfer plan | 45 | Grow per 2022 SSP assessment. TBD 11/2024 with new RCP | 100 as established by the last RCP. No target date was designated. TBD 11/2024 | Decreasing (2017-2022) per last breeding and transfer plan Growth Rate (λ) = 0.968 |
| Snow Leopard (<i>Panthera uncia</i>) | Provisional SSP | 1/17/2023 | 118 (63.55) from last breeding and transfer plan | 53 | Maintain per 2022 SSP assessment. TBD 11/2024 with new RCP | 150 as established by the last RCP. No target date was designated. TBD 11/2024 | Decreasing (2018-2023) per last breeding and transfer plan Growth Rate (λ) = 0.983 |

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| Tiger, Amur (<i>Panthera tigris altaica</i>) | Provisional SSP | 10/5/2023 | 104 (44.58) from last breeding and transfer plan | 45 | Grow per 2022 SSP assessment. TBD 11/2024 with new RCP | 120 as established by the last RCP. No target date was designated. TBD 11/2024 | Decreasing (2018-2023) per last breeding and transfer plan Growth Rate (λ) = 0.954 |
| Tiger, Malayan (<i>Panthera tigris jacksoni</i>) | Provisional SSP | 9/12/2023 | 50 (29.21) from last breeding and transfer plan | 24 | Grow per 2022 SSP assessment. TBD 11/2024 with new RCP | 100 as established by the last RCP. No target date was designated. TBD 11/2024 | Decreasing (2018-2023) per last breeding and transfer plan Growth Rate (λ) = 0.961 |
| Tiger, Sumatran (<i>Panthera tigris sumatrae</i>) | Signature SSP | 9/11/2023 | 68 (30.38) from last breeding and transfer plan | 31 | Grow per 2022 SSP assessment. TBD 11/2024 with new RCP | 100 as established by the last RCP. No target date was designated. TBD 11/2024 | Decreasing (2018-2023) per last breeding and transfer plan Growth Rate (λ) = 0.98 |
| Black-Footed Cat (<i>Felis nigripes</i>) | AZA Studbook | N/A | 29 from 2022 assessment | 17 | N/A | N/A | N/A |
| Bobcat (<i>Lynx rufus</i>) | AZA Studbook | N/A | 105 (53.52) from 2019 Studbook | 63 | N/A | N/A | N/A |
| Caracal (<i>Caracal caracal</i>) | AZA Studbook | N/A | 30 (14.16) from 2022 assessment | 14 | N/A | N/A | N/A |
| Fishing Cat (<i>Prionailurus viverrinus</i>) | AZA Studbook | N/A | 16 (9.7) from last breeding and transfer plan | 9 | N/A | N/A | N/A |

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| Puma (<i>Puma concolor</i>) | AZA Studbook | N/A | 103 (51.52) from 2018 Studbook | 55 | N/A | N/A | N/A |
| Tiger, Generic (<i>Panthera tigris</i>) | TAG- Monitored | N/A | 19 (7.12) from last breeding and transfer plan | 8 | N/A | N/A | N/A |

¹SSP designation options: Signature or Provisional

²To obtain this number from ZIMS, run a Census Report, which will default to 31 Dec of the year prior to this report. Set the Institution filter to "AZA" and check the box on the bottom of the screen to "Include animals with undetermined transaction dates" then Generate Raw Data.

³The CPT or CPS and date by which it should be achieved will be found in the most recent RCP for the TAG. This information may not be included in RCPs produced before 2023. Enter TBD with the scheduled date for the next RCP completion.

⁴The TPS and date by which it should be achieved will be found in the most recent BTP for the program. This information may not be included in BTPs produced before 2024 or, if included, may be outdated in BTPs produced in 2023 and earlier. Please pull from a 2024 or later BTP. If none exists enter TBD with the scheduled date for the next RCP completion.

⁵The five-year population growth rate (λ) can be obtained from the ZIMS Studbook, by running the Census Report as described above, referring to column named "Geometric Mean" and using number from cell labeled "last 5 years".

- Please attach an updated Animal Program Summary Table with Roles, Goals, and Essential Action items. (see the RCP Template Table 7). Please provide the action steps the TAG/SSP is taking, or intends to take, in order to achieve each identified goal, and indicate an approximate timeline for these actions.

Sample Animal Program Roles, Goals Table

| Common Name (Scientific Name) | Ocelot (<i>Leopardus pardalis</i>) |
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| Program Designation | Provisional |
| SMAART Goal #1 | <p>Improve ocelot breeding and general husbandry.</p> <p>The Ocelot SSP is currently listed as 'provisional' due to challenges associated with breeding recommended ocelot pairs. To increase breeding success, offspring production and overall ocelot well-being, the SSP will convene Zoom meetings with program leaders, advisors, steering committee members, IRs, curators, and keepers at SSP institutions to discuss best practices for pairing ocelots, managing neonates, and addressing overgrooming behaviors and any other general husbandry issues.</p> <p>Zoom meetings will be scheduled in Fall of 2023, once all essential participants have been identified and contacted. Meetings will be held quarterly to track progress.</p> |

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| Progress | Had a husbandry zoom meeting in October. Made progress with improving husbandry and getting pairs together. Breeding zoos have been reaching out for help with specifics and a few zoos have or are in the process of applying for grant money to improve exhibit and holding spaces to be better prepared for intros and births. Made 4 new interim breeding recommendations. Planning a husbandry workshop zoom meeting to take place in the next couple months. |
| SMAART Goal #2 | <p>Establish a more comprehensive and active ocelot management group.</p> <p>To determine goals and direction for ocelot population management and help with brainstorming and problem solving, the SSP will identify a new vice coordinator and a core group of 11 individuals to serve on the management group and 7 SSP advisors.</p> <p>Beginning in the Summer of 2023, the SSP will identify and solicit participation of individuals who are knowledgeable about ocelots and the management program. Once the new management group is established, quarterly meetings will be held via Zoom to develop specific goals and related action plans with periodic follow-up via email.</p> |
| Progress | Have management group in place. Had our first meeting in September. Plan to have another meeting by summer, 2024. |
| SMAART Goal #3 | <p>Import genetically valuable ocelots from Brazil and Europe.</p> <p>To grow the Ocelot SSP population, increase its genetic diversity and allow transfer of ocelots to the Ocelot Recovery Program in Texas (Ocelot SAFE), 6 (3.3) Brazilian ocelots have been identified for importation from Brazil in 2024. An additional 6 ocelots will be identified for possible importation from European zoos in the next two years. The SSP is already in communication with multiple facilities that will be willing to import.</p> <p>For Ocelot SSP management, Brazilian and generic ocelot populations housed in US zoos will be combined, pending approval by the Brazilian government (IBAMA).</p> <p>This combined population will have greater gene diversity and sustainability, allowing the SSP to transfer cats to new zoos seeking ocelots while providing additional ocelots to the Ocelot Conservation Facility in Texas as a source population for breeding and reintroduction into the wild.</p> |
| Progress | Working on import permits for 6 cats coming from Brazil. Have been in contact with the EEP coordinator and have sent requests to 8 European zoos for cats. Contacted by a zoo in Columbia SA and one in Trinidad who are looking to place ocelots. 4 from the Cali Zoo in Columbia and 4.10 from the Trinidad Zoo. Working on conversations with the representative from these zoos to start the process of importing possibly from these zoos. Identified 5 importing zoos to receive imported pairs. |

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| Common Name (Scientific Name) | Serval (<i>Leptailurus serval</i>) |
| Program Designation | Provisional |
| SMAART Goal #1 | Form an active management group of 5-8 people. |

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| | <p><i>Rationale:</i> A lot of work needs to be done to explore the source of poor breeding success, more than the capacity of the current SSP (2 people). Also, increasing the number of people committed to serval breeding will bring a greater focus on this issue.</p> <p><i>Action items (may change as more information on the issue is gathered):</i></p> <ol style="list-style-type: none"> 1. Establish steering committee by the end of October 2023. 2. Hold at least one committee meeting by mid-December 2023 3. Hold at least 4 committee meetings in 2024 to track progress |
| Progress | Managment group was formed and have had 2 meetings with another one planned in April. |
| SMAART Goal #2 | <p>Utilize the newly formed steering committee as a task force to identify/define potential reasons for poor breeding, acquire information about current husbandry trends/practices, collate into meaningful data, and use that data to establish best husbandry practices that will optimize breeding with assigned roles for each committee member to explore husbandry trends/practices that may be contributing to the lack of breeding.</p> <p>Action Items:</p> <ul style="list-style-type: none"> • Collate information on status/details of breeding recs by December, 2023. • Start strategizing on how to address breeding deficiencies during December meeting. This includes simultaneously collecting information on husbandry to update information for the Small Felid Animal Care Manual. Likely this will include developing one or more surveys. • Form a documented strategy and track progress during the 4 meetings in 2024. Disseminate any surveys by the time meeting 3 occurs. Have results of surveys by meeting 4. • Communicate elements of the strategy and results either in Felid TAG Times or in State of the Serval Address. |
| Progress | Met twice. Roles are being defined/assigned. |
| SMAART Goal #3 | <p>To improve genetic management and troubleshoot unknown pedigrees, continue to work with geneticists to map the Serval genome and establish a new mean kinship baseline by the next Breeding and Transfer Plan</p> <p><i>Rationale:</i> The assessment's high score related to Genetics is contingent upon finishing the genetic analysis of the population that was already started. Without this work, the serval population has a high percentage of unknown pedigree and would be scoring poorly in this category. .</p> <p>Action item:</p> <ul style="list-style-type: none"> • Complete Genetic analysis by November, 2024. • Form Breeding and Transfer Plan incorporating results of genetic analysis |
| Progress | Genetic analysis is underway. B/T plan is slated for this fall. |

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| Common Name (Scientific Name) | Amur Tiger (<i>Panthera tigris altaica</i>) |
| Program Designation | Provisional |
| SMAART Goal #1 | <p>Reach a population size of 120 over a 5-year period by producing 5-6 litters/year.</p> <ol style="list-style-type: none"> Essential Action 1: Make more breeding recommendations for inexperienced females 3-7 yr. old, particularly those that are in the top 75% of the mean kinship list, to improve their future breeding success. Essential Action 2: Increase the number of introductions that are occurring; consider pairing experienced breeders with naïve animals (vs. both animals being inexperienced) and consider animals' personalities when making pairing recommendations. For all annual breeding recommendations, the Vice Chair will contact facilities a minimum of every other month to follow up on their efforts for introduction. Timely responses will allow us to act quickly and direct the IR's to THAT, Tiger Husbandry Advisory Team, as needed for guidance and troubleshooting. Correspondence and support will continue over the course of attempting and completion of the recommendation. The PMC track survey provides data for the number of recommendations of introduced pairs for each year. This PMC response data combined with communication from IR's will reflect the number of facilities that introduced their tigers. From here we can draw a comparison between the years to ensure we successfully have increased the number of introductions. Essential Action 3: Incorporate recommendations to move future breeders at a younger age (~18 months of age) to allow time for transfers and for animals to settle into a new facility. Essential Action 4: Make fewer repeat carry-over breeding recommendations for pairs that have already had a carry-over and did not breed and do not carry over a breeding recommendation for more than 3 years. Essential Action 5: Make fewer breeding recommendations for older females (> 10 yr old) that have never bred before, IF it negatively impacts the ability to create pairs with a greater probability of success. Essential Action 6: The Vice Chair should conduct regular check-ins with facilities that have breeding recommendations to provide advice, encouragement or to determine if further assistance is needed. Essential Action 7: Use THAT to help with breeding introductions by actively assigning a mentor to any facility that has not bred tigers in the last 3 years or that has had high staff turnover. Essential Action 8: Use PMC track to evaluate recommendation outcomes and determine which facilities require further support. Essential Action 9: Tiger staff should work on behavioral management with individual tigers to ensure smooth transitions between facilities (e.g. crate training, hand injection training) Essential Action 10: Convert generic tiger holding space in cooler climates to Amur tiger space as those spaces become available through natural attrition. Essential Action 11: Identify institutions building/renovating tiger facilities to increase holding and exhibit spaces. |

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| | I.Essential Action 12: Conduct a new RVA to determine the factors contributing to the lower breeding success observed over the past 10-15 years. |
| Progress | <p>In summary: Two births this season. Another female in the population confirmed pregnant and due end of May. One female likely pregnant and would be due mid-June. A fair number of other pairings are showing great compatibility and showing breeding potential. Every single facility that has a breeding recommendation has made notable effort. A vast majority have been introduced to one another and shown solid copulation attempts. Several others will be introducing their pair for the first time on the next estrus cycle. This is a large improvement from past 5 years.</p> <ol style="list-style-type: none"> This has been applied on current annual recommendations and will continue to be applied until consistent growth and stabilization in population. Has been applied to current annual recommendations. Regular communication with IRs with breeding recommendations have been occurring a minimum of every 1-2 months. In addition to this communication, 7 of the breeding recommendations have received consultation from THAT, with ongoing support. Applied to current annual recommendations as appropriate for spatial availability and preparation for future breeding pairings. Applied to current annual recommendations. Of the 24 breeding recommendations made in the last annual plan, only 6 are carryovers (including interim recommendations). Two of these have already produced cubs during this plan. In the 2022-2023 B&T plan, 19 of the 21 breeding recommendations were carryover. Applied to current annual recommendations. Regularly occurring, see response to B. Regularly occurring, see response to B. Due to the frequent communication with every breeding facility, have not had to utilize this as of yet for this annual plan. But will if needed. Have provided consultation for needed facilities thus far. Working on the facilitation of a resiliency webinar that will be held by THAT in June. THAT will be hosting a subsequent office hours to this topic, with particular focus on transports in July. This month was chosen to coordinate nicely with timeline of next plan's transfer recommendations. It will provide support to facilities that are drafted to transfer a tiger, aiding in their efforts to help provide a smooth transition. Already transitioned one facility from generic to Amur tigers. They are actively breeding their pair; great behavioral compatibility and we are in regular contact with them to provide guidance. . Currently in process. BRIDGEPORT currently in construction for new Amur tiger area. Also gained another facility, BULGER. VC has been in contact with four other facilities that are interested in Amur tigers within the next 3 years. No progress at this point. At present, it seems the lack of staff experienced in breeding tigers has been the largest impact in breeding success. Significant effort being made in this regard to train and support tiger teams nationwide. As this seems to be yielding good results, focusing most attention on this direction. |

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| SMAART Goal #2 | <p>In the next 5-year period, import 2-3 animals from S. Korea into North America to assist with maintaining at least 96% GD within the SSP.</p> <ol style="list-style-type: none"> Essential Action 1: Identify at least 2 animals for importation within the next year. Essential Action 2: Identify receiving institutions for importation. Communication with prospective institutions already in progress. Essential Action 3: Yearly evaluate the potential for further imports and continue GSMP participation and leadership to promote regional and global population viability. Essential Action 4: Make breeding recommendations for imported tigers. |
| Progress | <p>Identified two tigers and made recommendations to transfer one SEOUL female to COLUMBUS. The second recommended transfer of a SEOUL female to GRANBY was cancelled due to permit issues. VC has since been in contact with the EEP regarding the import of two young female tigers, both currently under the age of 18 months. The importation of these females each provides an increase to the Amur tiger SSP genetics diversity. Once all parties agree, official recommendations will be provided, and these females will be provided breeding recommendations as soon as transfer complete/of breeding age.</p> |
| SMAART Goal #3 | <p>Over the next 5 years, expand genetic representation (i.e., number of animals and number of samples per animal) within the Genome Resource Bank (GRB).</p> <ol style="list-style-type: none"> Essential Action 1: Review genome resource bank objectives and strategy. Essential Action 2: Review GRB holdings and identify priority animals for sampling. Essential Action 3: Identify animals and institutions to participate in semen collection on a yearly basis in the breeding and transfer plan; attempt to bank semen from all males. Essential Action 4: Add genetic representation of females to the GRB through cryopreservation of fibroblast biopsies. |
| Progress | <p>A-D: In progress. Continue to bank males during routine exams, and encourage all facilities to do so, regardless of if collected in past or if received a breeding recommendation. In our annual surveys we ask facilities if they will be willing to collect semen from their male during routine exams. We share this list with our Reproductive Vet Advisor to ensure collection coordination. Meeting in near future to discuss current GRB status, adding female representation and prioritizing specific males for next year. We will utilize this list to reach out to respective parties directly as needed to ensure participation during this next B&T plan.</p> |

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| Common Name (Scientific Name) | Malayan Tiger (<i>Panthera tigris jacksoni</i>) |
| Program Designation | Provisional |
| SMAART Goal #1 | <p>Improve gene diversity to at least 90% by pursuing imports of unrelated animals and/or animals with underrepresented genetic lines over the next 5 years.</p> <ol style="list-style-type: none"> Essential Action 1: Identify potential candidates for import. Essential Action 2: Cultivate relationships and identify feasibility due to rules, terms and agreements and pursue imports if feasible. |

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| | <p>c. Progress: The SSP continues to carefully monitor the situation in Asian zoos with Malayan tigers and identify opportunities to collaborate on natural and assisted reproduction and discuss importation and exportation of Malayan tigers. Potential tigers have been identified.</p> |
| Progress | <p>The SSP has been working with potential partners at Singapore Zoo, we meet quarterly via zoom to discuss husbandry and transfer of potential candidates to genetically strengthen both programs. Currently we have identified two individuals: 0.1 female to transfer to Singapore and 1.0 to transfer to the US.</p> |
| SMAART Goal #2 | <p>Grow population by 5% within 5 years by breeding all viable (breeding age) females in the population.</p> <ol style="list-style-type: none"> Essential Action 1: Provide breeding recommendations for all breeding age females. Essential Action 2: Increase the number of introductions that are occurring; consider pairing experienced breeders with naïve animals (vs. both animals being inexperienced) and consider animals' personalities when making pairing recommendations. Essential Action 3: Incorporate recommendations to move future breeders at a younger age (~18 months of age) to allow time for transfers and for animals to settle into a new facility. Essential Action 4: Make fewer repeat carry-over breeding recommendations for pairs that have already had a carry-over and did not breed and do not carry over a breeding recommendation for more than 3 years. Essential Action 5: Make fewer breeding recommendations for older females (> 10 yr old) that have never bred before, IF it negatively impacts the ability to create pairs with a greater probability of success. Essential Action 6: The Vice Chair should conduct regular check-ins with facilities that have breeding recommendations to provide advice, encouragement or to determine if further assistance is needed. Essential Action 7: Use THAT to help with breeding introductions by actively assigning a mentor to any facility that has not bred tigers in the last 3 years or that has had high staff turnover. |
| Progress | <p>All 13 reproductive females are paired. Of these pairs: 3 females are young and not currently showing signs of estrus, however all three institutions are completing hormone analysis to assist in determining a cycle. 4 of the 13 facilities have used THAT to problem-solve in specific breeding challenges. Some breeding challenges also involved consultation with our vet advisors for pain management for our older males. We have had one litter (1.2) produced, Nov. 4, 2023. Vice Chair is conducting regular check ins with facilities to encourage, and assist where needed. All check ins are documented.</p> |
| SMAART Goal #3 | <p>Over the next 5 years, expand genetic representation (i.e., number of animals and number of samples per animal) within the Genome Resource Bank (GRB).</p> <ol style="list-style-type: none"> Essential Action 1: Review genome resource bank objectives and strategy. Essential Action 2: Review GRB holdings and identify priority animals for sampling. Essential Action 3: Identify animals and institutions to participate in semen collection on a yearly basis in the breeding and transfer plan; attempt to bank semen from all males. Essential Action 4: Add genetic representation of females to the GRB through cryopreservation of fibroblast biopsies. |

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| Progress | All institutions have been notified several times regarding the need to complete semen collection whenever an individual is involved in a medical procedure. We had one male that was euthanized during this time period. Although testicles and spermatoc cord were submitted for collection, no sperm was recovered or identified in this individual. As of 2023, we have successfully collected from 6 Malayan males. Jason Herrick is currently comparing our GRB to our top MK list to identify target individuals for this next year. However, at this time most of our males are set in breeding pairs at institutions, so the ability for pre-ship collection is low. |
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| Common Name (Scientific Name) | Snow Leopard (<i>Panthera uncia</i>) |
| Program Designation | Provisional |
| SMAART Goal #1 | Increase births by 10% over the next 5 years by improving breeding success. Essential Action: Develop breeding survey to evaluate successful breeding situations and define factors that optimize breeding success. Include individual cat history. Survey to be distributed by 2024. Survey return and analyzed by 2025. Give feedback to facilities before 2026 breeding season. |
| Progress | Survey research started |
| SMAART Goal #2 | Submit to AZA an Animal Care Manual within 24 months of the official template being finalized. Possible collaboration with Amur Leopard, Puma and Jaguar are also possibilities to create combined ACM. |
| Progress | Waiting for template to be completed. |
| SMAART Goal #3 | Increase at least 5 spaces for Snow leopards in the next 5 years. a. Essential Action 1: Develop process to work with Non-AZA institutions. A focus on CAZA members could be a possibility. Identify AZA facilities willing to export to non-AZA institutions by 2024. b. Essential Action 2: Post on Felid TAG and other AZA list serves to recruit more institutions every year within three months of compiling breeding and transfer plan. |
| Progress | Space has become available recently. |

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| Common Name (Scientific Name) | Jaguar (<i>Panthera onca</i>) |
| Program Designation | Provisional |
| SMAART Goal #1 | Import at least three pairs of genetic founders before the end of 2027. (This is actually feasible, as I have identified more than three institutions willing to work on a group import project.) |
| Progress | One zoo permit pending. |
| SMAART Goal #2 | Before the end of 2025, investigate and implement steps that consistently achieve at least 50% success of starting the breeding recommendations made by the SSP. |
| Progress | Communicating with advisors to help monitor more tightly and proactively advise facilities with recommendations to make sure they are confident with putting cats together for breeding. |

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| SMAART Goal #3 | Through personal communication, add at least two new participating facilities capable of breeding jaguars before the end of 2027. |
| Progress | One facility is already identified. |

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| Common Name (Scientific Name) | Sand Cat (<i>Felis margarita</i>) |
| Program Designation | Provisional |
| SMAART Goal #1 | <p>Achieve targets set in the 2024 Breeding and Transfer Plan to advance population sustainability through developing a strategy to recruit three new spaces in three years by providing new partner and breeding opportunities.</p> <ul style="list-style-type: none"> a. Essential Action 1: Identify new holding institutions through developing responsible partnerships with non-AZA facilities/programs to increase space for AZA institutions, achieve new resources, and expand expertise through partnerships. b. Essential Action 2: Communicate with existing holders to determine if there is a possibility to increase existing space through management changes (e.g., housing non-breeding pairs/groups together). c. Essential Action 3: Conduct genetic testing of the unknown pedigrees in two AZA institutions and network to understand genetic lineage of animals from potential non-AZA partnerships. |
| Progress | <ul style="list-style-type: none"> a. Found a contact and a plan for working with ZAA to recruit non-AZA holders. Have connected and built relationships with three non AZA that have potential for partnership. b. Achieved: Two facilities have introduced male offspring to the sire and are managing atypical boy pairs. c. In progress- connecting with CREW and making a plan. High priority but need to be further along. |
| SMAART Goal #2 | <p>Design and implement an “education and well-being” information sharing plan for sand cats in the next two years.</p> <ul style="list-style-type: none"> a. Essential Action 1: Facilitate purpose driven/focused workshops (at least two a year for three years) to work through areas in the 2023 Sand Cat Husbandry Survey assessing what we could improve on, increase the small cat network, and foster expertise exchange through surveying the needs of the institutions. b. Essential Action 2: Develop a care sheet with support of, or in collaboration with, Felid TAG or Small Cat Alliance. This would distribute "best practices", familiarize the small cat network with available information, contacts for questions, and increase standardization of the program. c. Essential Action 3: Distribute to IRs general preventative medicine recommendations by the end of 2023 via the program’s veterinary advisors. d. Essential Action 4: Foster a relationship to network with EAZA and private and/or non-AZA institutions for information exchange. |
| Progress | <ul style="list-style-type: none"> a. In collaboration with Small Cat Alliance, we have started webinars. First one brought in over 100 viewers with 38 facilities represented. b. In discussion with Small Cat Alliance. Have not begun work on this. c. Done via Dr.Sadler. |

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| | d. Not started. |
| SMAART Goal #3 | <p>Leverage assisted reproductive technology (ART) to improve genetic management and long-term sustainability of sand cats.</p> <ul style="list-style-type: none"> a. Essential Action 1: Collect and cryopreserve sperm from each male in the population to develop a functional genome resource bank, which can provide frozen sperm for artificial insemination (AI) and serve as a safeguard against the loss of genetic diversity. b. Essential Action 2: Utilizing targets set in the 2024 Breeding and Transfer Plan, conduct five AIs in the next three years with either fresh sperm from resident/nearby males or frozen sperm from underrepresented or founder males. |
| Progress | <ul style="list-style-type: none"> a. In progress. b. First AI attempt since this goal was made will occur April/May 2024. |

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| Common Name (Scientific Name) | Amur Leopard (<i>Panthera pardus orientalis</i>) |
| Program Designation | Provisional |
| SMAART Goal #1 | <p>Reach a population size of 100 animals by producing a minimum of 5 cubs per year through natural breeding and AI.</p> <ul style="list-style-type: none"> a. Work with institutions that have had breeding success and either recommend their pairs to breed again or send them new animals that have not bred so they can use their facility knowledge and expertise to improve breeding success for the population. b. Continue working with repro advisor and CREW in order to identify potential candidates for AI |
| Progress | The planning for the 2024 breeding and transfer plan is underway with the intention of following through with the above goals. |
| SMAART Goal #2 | <p>Increase holding institutions by a minimum of three institutions over the next 5 years</p> <ul style="list-style-type: none"> a. Post on AZA list serve to recruit new institutions. b. Reach out to AZA professional contacts and solicit holding space for Amur leopards. |
| Progress | We have identified one institution that will be a new holder of Amur leopards within the next year. |
| SMAART Goal #3 | <p>Import 3-5 animals from EAZA (and/or potentially JAZA) over the next 5 years in order to increase GD</p> <ul style="list-style-type: none"> a. Continue working with EEP coordinator in order to develop a list of genetically beneficial animals for import from EAZA. b. Develop a list of institutions that are willing to import |
| Progress | We are in communication with EAZA's Amur leopard EEP program leader and plans are in the works. We will incorporate plans for import into the next Breeding and Transfer Plan. |

- Please complete an updated Animal Care Manual table. List each SSP under the TAG's purview and provide information for each.

Sample Animal Care Manual Table

| Common name (<i>Scientific name</i>) | SSP Designation ¹ | ACM Status* | ACM Format** | ACM Coordinator | Facility | Email | Phone |
|--|---|--|---|-------------------------------------|---|--|--|
| Cheetah (<i>Acinonyx jubatus</i>) | Signature | 1 st Draft | Standalone | Karen Meeks Adrienne Crosier | White Oak Conservation Center SCBI | Kmeeks@white_oak.org Crosiera@scbi.edu | (123) 456-7089 |
| Small Felid Serval (<i>Leptailurus serval</i>) Lynx, Canada (<i>Lynx canadensis</i>); Ocelot (<i>Leopardus pardalis, mitis</i>); Cat, Pallas' (<i>Otocolobus manul</i>); Cat, Sand (<i>Felis margarita</i>) | Provisional Signature Provisional Signature Provisional | 1 st Draft almost done | Combined (also will include black-footed cat, bobcat, fishing cat, and caracal) | Laura Carpenter Dan Dembiec | Cincinnati Zoo and Botanical Gardens Memphis Zoo | laura.carpenter@cincinnatiatizoo.org Ddembiec@memphiszoo.org | (513) 364-7678 (901) 333-6705 |
| Jaguar (<i>Panthera onca</i>) | Provisional | Published (September, 2016) 2 nd publication drafted and submitted | Standalone | Stacey Johnson | Roger Williams Park Zoo | sjohnson@rwpzoo.org | (401) 785-3510 x309 |

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| | | (March, 2024) | | | | | |
| Lion (<i>Panthera leo</i>) | Signature | Published and translated in Spanish (January, 2012) | Standalone | Hollie Colahan | Birmingham Zoo | hcolahan@birminghamzoo.com | (205) 397-3848 |
| Tiger (<i>Panthera tigris orientalis</i> , <i>jacksoni</i> , and <i>sumatrae</i>) | Provisional Provisional Signature | Published and translated in Spanish (2016) | Standalone | Trista Fischer | Minnesota Zoo | trista.fischer@state.mn.us | (952) 431-9328 |
| Clouded leopard (<i>Neofelis nebulosa</i>) | Signature | 1 st Draft almost done | Standalone | Jilian Fazio | Turtle Back Zoo | jfazio@parks.essexcountynj.org | (201) <u>341-1279</u> |
| Amur Leopard (<i>Panthera pardus orientalis</i>), Snow leopard (<i>Panthera uncia</i>) | Provisional Provisional | Not started | Combined (also will include puma) | Tentatively Katie Kuhn | Milwaukee County Zoo | Kathryn.Kuhn@milwaukeecountywi.gov | 414-256-5447 |

* ACM Status can be reported as: (1) Published (indicate YEAR) and **Revision** in progress; (2) ACM **Published** (indicate YEAR); (3) **Submitted** to AZA for review/editing; (4) **Writing** in Progress (not submitted yet); (5) Active **Planning** has begun with contributors; (6) Process has **not started**.

** Format options are **Standalone** (ACM is for just this species) or **Combined** (ACM is for multiple species or combined in an umbrella ACM). For combined format indicate the umbrella category or other species included.

- **X** I have conducted an annual review of all SSP Sustainability Reports under my purview. **The program leaders within the Felid TAG will be asked to review and update Sustainability Reports at the Spring virtual meeting.**
- **X** I have attached the Animal Program Deadlines and Planning Details Report from PMCTrack.
- Optional: Please list any field conservation, research projects, and/or special accomplishments that have been supported and/or conducted by the TAG in the past year. **The Felid TAG endorsed the onboarding of an Ocelot SAFE program.**