

**ASSOCIATION  
OF ZOOS &  
AQUARIUMS**

# AZA Regional Studbook Keeper Handbook



Created by the  
**AZA Animal Population Management Committee**  
in association with the  
**AZA Conservation, Management, and Welfare Sciences Department**



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## Chapter 1. Introduction

### Purpose

The purpose of an *Association of Zoos and Aquariums (AZA)* Regional *Studbook* is to document the pedigree and history of each animal within a managed population among AZA-accredited facilities, *Sustainability Partners*, and *Certified Related Facilities (CRFs)*. If associated with a *Species Survival Plan® (SSP)* programs, these data will be validated and further analyzed to summarize the current demographic and genetic status of the population by the *AZA Population Management Center (PMC)* or a *PMC Adjunct Advisor* to manage populations.

### Description

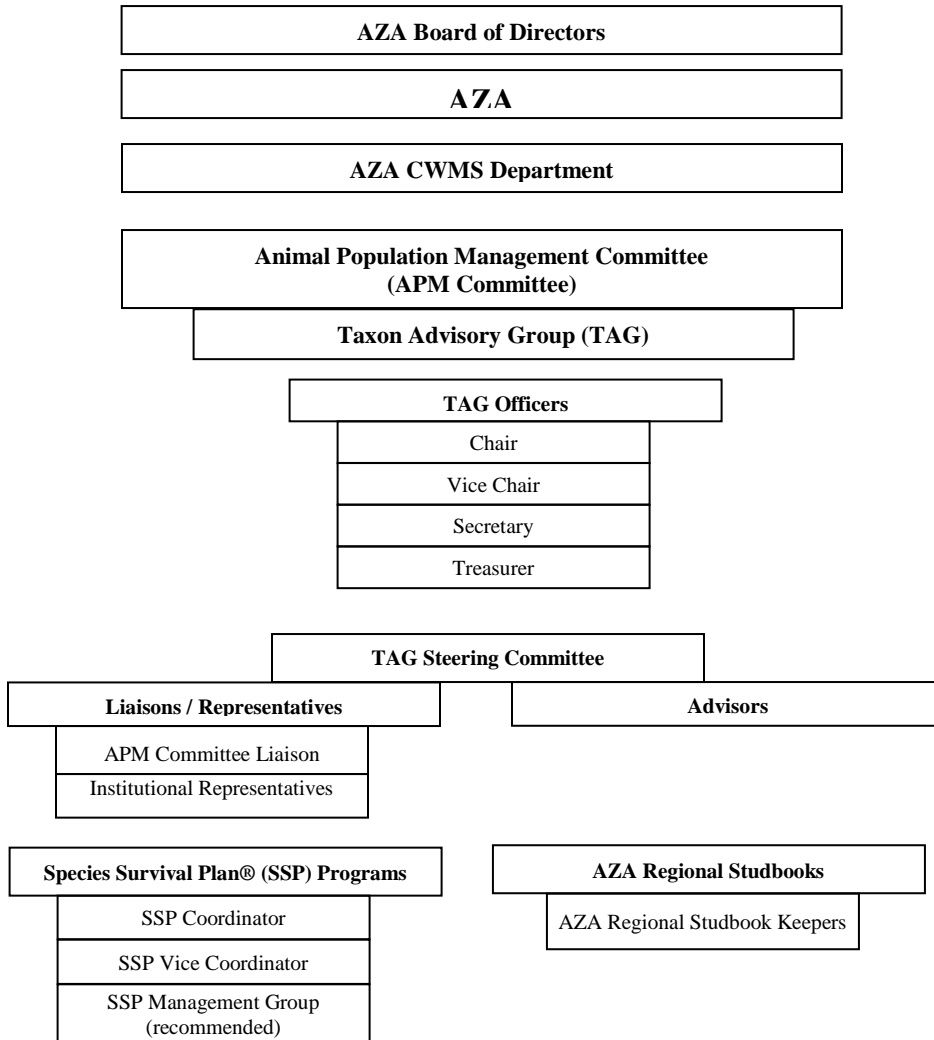
*AZA Taxon Advisory Groups (TAGs)* identify, manage, and support AZA's cooperative Animal Programs and develop *Regional Collection Plans (RCPs)* that recommend taxa for cooperative management among AZA-accredited facilities, *Sustainability Partners*, and *Certified Related Facilities (CRFs)*, identify Animal Program management designations, and define Animal Program roles and goals. All Animal Programs, along with the *Animal Population Management Committee (APM Committee)*, must assure that the appropriate *AZA Board approved policies* are followed in all aspects of Animal Program management. All AZA member facilities and Animal Programs, regardless of management designation, must adhere to the AZA Policy on Responsible Population Management Policy, as well as the AZA Code of Professional Ethics. All [Board approved policies](#) are found on the AZA website.

AZA Regional Studbooks document the pedigree and entire demographic history of each individual in a population. These are compiled and maintained by an AZA Regional *Studbook Keeper* and are valuable tools to track and manage each individual as part of a single, *ex situ* population. All AZA Regional Studbook Keepers work directly with the associated TAG, all AZA facilities, approved Sustainability Partners, the APM Committee, and the AZA CMWS Department. For designated SSP programs, the AZA Regional Studbook Keeper must also work closely with the associated *SSP Coordinator* (if the AZA Regional Studbook Keeper is not the SSP Coordinator), and the PMC or a PMC Adjunct to complete an updated, and accurate AZA Regional Studbook for use in demographic and genetic analyses relevant for creating a *Breeding and Transfer Plan (BTP)*.

All AZA Regional Studbooks track individuals for population management purposes; however, population planning resources are prioritized for SSPs and relevant *Saving Animals From Extinction (SAFE)* Programs. All Animal Programs that are designated as a SSP Program must have an associated AZA Regional Studbook (or an International Studbook).

## Chapter 2. Organization

### Animal Program Overview



## AZA Regional Studbook Keeper

### Position Overview

The AZA Regional Studbook Keeper is responsible for maintaining an accurate record of the histories of all individual animals in an *ex situ* population for the purpose of population management. This is an important responsibility because the global zoo and aquarium community depends on the maintenance of accurate Studbook records in order to manage populations and fulfill the goal of long-term sustainability. Ideally, the AZA Regional Studbook Keeper also serves as that Program's SSP Coordinator or the SSP Vice Coordinator and the Regional Studbook data will be used to create the SSP Program's BTP. The AZA Regional Studbook Keeper works directly with the associated TAG and SSP Program to complete an updated and accurate AZA Regional Studbook to be used for demographic and genetic analyses relevant to the SSP Program's population management.

TAGs must list these AZA Regional Studbooks in their ***Regional Collection Plan (RCP)***, including Studbook Keeper contact information in Table 1, and at minimum include the species information in the Animal Programs Summary Table and the Management Update Table.

The AZA Regional Studbook Keeper serves as a contact and AZA expert for the species and abides by the duties and responsibilities set forth by the AZA, APM Committee, SSP Program (if relevant), and the TAG. If the Studbook is an International Studbook, and the International Studbook Keeper is employed in an AZA member facility, the Studbook Keeper is held to the same ***accountability*** requirements as an AZA Regional Studbook Keeper with regards to the AZA Regional Studbook data.

### Eligibility Requirements

AZA Regional Studbook Keepers *must*:

- Be a paid employee at an AZA member facility (AZA-accredited facility, Certified Related Facility, Society Partner, and Conservation Partner).
  - The term “paid” refers to hourly or salary. The intent of this requirement is to assure that each Program Leader is fully integrated with their facility, serves a vital and consistent role within the facility that is outside of their role as a Program Leader, and has the facility's full support to serve as a Program Leader. Payment of a minimal amount to a Program Leader who is no longer integrated with their facility outside of their role as Program Leader does not fulfill this eligibility requirement.
- Have an individual AZA membership.
- Uphold Studbook and Animal Program business confidentiality.
- Be well versed in the biology and behavior of the Studbook species.
- Complete the AZA Professional Development Course “Population Management 1 (PM1) Data Management and Processing” within 2 years of becoming the AZA Regional Studbook Keeper. Studbook Keepers are also encouraged to take “Population Management 2 (PM2): Data Analysis and Breeding Recommendations.”
- Have proficiency in word processing and spreadsheet programs, population management software, utilizing AZA web resources, and have email access.

- Have strong skills in organization, communication, and in establishing and maintaining effective working relationships with diverse groups of individuals.
- Provide a Statement of Commitment included in the AZA Regional Studbook Keeper Application.

### **Essential Position Functions**

- Regularly update the AZA Regional Studbook database. If the Studbook is linked to an SSP Program, the Studbook must be updated at least six weeks prior to planning with a PMC or PMC Adjunct Advisor.
  - Adhere to the “Guidelines for Data Entry and Maintenance of AZA Regional Studbooks.”
  - In rare cases where the studbook is not maintained in ZIMS for Studbooks, a complete, current AZA Regional Studbook database (Access or Excel) must be submitted to PMC.
- Create, update and submit a current AZA Regional Studbook publication to the AZA CMWS Department for publication on the AZA website, following the template and requirements outlined in the document “How to Publish a Studbook Using ZIMS for Studbooks” for Word or Mac.
  - within 12 months of completing PM1.
  - within 12 months of becoming AZA Regional Studbook Keeper if the Studbook Keeper has already completed PM1 prior to becoming an AZA Regional Studbook Keeper.
  - must occur at least once every 3 years in accordance with the currentness date listed on the front cover of the previous Studbook publication; however, annual updates are preferred
- Work closely with the appropriate TAG and SSP Coordinators.
- Attend relevant meetings, when possible.
- Update new contact information, including facility, phone, fax, and email via the AZA website by logging into their account on “My AZA”, As well as update membership information by sending new information to membership@aza.org.
- Review relevant AZA Online Training Modules.
- Serve as a contact and AZA expert for the Studbook species. Understand that Studbook Keepers are not responsible for providing engineering advice or letters of endorsement to facilities designing new exhibits for the Animal Program species. Rather, it is the responsibility of those who are developing new exhibit designs to approach a range of AZA member facilities to learn about various specifications or sources regarding the species to be exhibited.
- Abide by the duties and responsibilities set forth by the AZA, the APM Committee, and the TAG.
- Adhere to the AZA Communications Guidelines.
- Grant access to the ZIMS for Studbook to related parties (e.g., SSP Coordinator, TAG members, Advisors) depending on need and individual role as outlined in AZA



Guidelines for I. Roles and Access to ZIMS for Studbooks, and II. Sharing Studbook Data.

- Maintain contact with counterparts in other regional zoo and aquarium associations to facilitate inter-regional cooperation, if applicable.
- Provide data to the International Studbook Keeper for the Studbook species, if applicable.
- If there is a separate International Studbook Keeper for the species or if data are combined in a single International Studbook, the AZA Regional Studbook Keeper is still responsible for current and accurate AZA regional data needed for AZA population analyses.
- If resigning from the position of the AZA Regional Studbook Keeper, provide a written notice of departure to the TAG Chair, and provide all relevant AZA Regional Studbook documents to the TAG Chair and to the replacement Studbook Keeper (if known).

## Chapter 3. AZA Regional Studbook Management

### Animal Program Management Designations

AZA Animal Programs include SSPs (Provisional, Signature, and Secure), and AZA Regional Studbook Programs. As mentioned above, an AZA Regional Studbook is a required element of any SSP program. SAFE Programs that include an externally-managed ex-situ population will also in some cases require an AZA Regional Studbook. As other types of AZA programs develop (e.g. larval programs), these too may require AZA Regional Studbooks or other approved population tracking programs in the future. TAGs may also identify TAG monitored status for certain species which do not require tracking via a formal studbook.

### *Creating/Maintaining Studbooks for Non-SSP Programs*

The TAG may choose to create Studbooks for certain populations that they would like to formally track or hope to grow to meet the criteria to become an SSP Program. These AZA Regional Studbooks are overseen by the TAG and are included in the RCP.

### Studbook Program Oversight

- Such AZA Regional Studbooks are managed only by the TAG, with additional oversight by the AZA CMWS Department and the APM Committee.
- These studbooks are subject to accountability requirements listed on page 12 of this document.
- The TAG may work with the Studbook keeper to develop goals for the studbook and has the option to include these goals in the RCP.
- If a Studbook program becomes eligible for SSP status and is approved through the RCP process, the TAG will determine whether the studbook keeper should also become the SSP coordinator or if the two roles should be kept separate for the species.

## Chapter 4. AZA Regional Studbook Administration

### Election Processes

AZA Regional Studbook Keepers are elected by their TAG's *Steering Committee* if the TAG has an approved RCP, or by the APM Committee if the TAG does not have a current, approved RCP.

AZA Regional Studbook Keeper vacancies must be announced in the monthly [Animal Programs Update](#) and listed on the [Current Program Leader Vacancy](#) webpage on the AZA website for a minimum of 30 days.

### Applying to Become an AZA Regional Studbook Keeper

- Ideally, the SSP Coordinator or SSP Vice Coordinator is also the AZA Regional Studbook Keeper for the SSP Program, but the TAG may split these roles when deemed appropriate in consultation with the APM Committee.
- AZA Regional Studbook Keeper Applications must be submitted to the TAG Chair (or the AZA CMWS Department if the TAG does not have a current, approved RCP or there is no TAG Chair).
- Provisional, Signature, and Secure SSP Programs, SAFE programs, larval programs, and the differences in their management strategies must be fully understood when individuals apply for an AZA Regional Studbook.
- The TAG will submit the applications to the Steering Committee and call for a vote. If the TAG does not have a current, approved RCP or there is no TAG Chair, the applications will be sent by the AZA CMWS Department. Once these applications are compiled, the AZA CMWS Department will ask the TAG to endorse a candidate. The AZA CMWS Department will then submit all applications and the TAG's endorsement to the APM Committee for a vote.
- A new AZA Regional Studbook Keeper will be elected from the applicant pool by majority vote by the Steering Committee and the TAG Secretary will communicate this new appointment to the applicant and the AZA CMWS Department. If the TAG does not have a current, approved RCP or there is no TAG Chair or Secretary, the AZA CMWS Department will communicate the outcome of the election by the APM Committee to the TAG and the new AZA Regional Studbook Keeper.
- The TAG Secretary, or the AZA CMWS Department, will communicate the new appointment decision to the rest of the applicant pool.
- If there are no applicants during the 30-day period, the vacancy will remain posted.

### AZA Regional Studbook Keeper Institutional Changes

#### Change in Facility

- AZA Regional Studbook Keepers who move to a new AZA member facility must confirm that their new facility endorses their continued role as studbook keeper and must, within 90 days of departure from their original facility, submit new Statements of Commitment to the TAG Chair.

- If the AZA Regional Studbook Keeper does not wish to maintain the role as studbook keeper or their new facility does not endorse the studbook keeper to maintain the role, management of the studbook will be relinquished and the vacancy must be advertised in the monthly Animal Programs Update and posted on the AZA website for a minimum of 30 days.
- All AZA Regional Studbook Keepers (and International Studbook Keepers employed by AZA member facilities) must update their new contact information, including facility, phone, fax, and email to the TAG Chair and via the AZA website by logging into their account on “My AZA”, as well as update membership information by sending new information to [membership@aza.org](mailto:membership@aza.org).
- If the AZA Regional Studbook Keeper takes a permanent position at a non-AZA accredited facility, leaves and/or retires from the Zoo and Aquarium field, they must immediately resign as studbook keeper and communicate this to the TAG Chair and AZA CMWS Department via email to [animalprograms@aza.org](mailto:animalprograms@aza.org). AZA Regional Studbook Keepers who do not resign under these conditions will be removed by the TAG and studbook keeper access in ZIMS for Studbooks will be removed upon the studbook keeper’s end date.

### **Loss of Employment**

- If an AZA Regional Studbook Keeper loses their position from an AZA member facility they must communicate this to the TAG Chair and AZA CMWS Department via email to [animalprograms@aza.org](mailto:animalprograms@aza.org).
- AZA Regional Studbook Keepers have 6 months to re-gain employment with another AZA member facility before they must surrender their position.
- If an AZA Regional Studbook Keeper is no longer employed at an AZA member facility and fails to communicate with the TAG or the AZA CMWS Department within 1 month, it will be assumed that the Studbook Keeper has abandoned the role in the Animal Program and the TAG may proceed with filling the vacancy before the 6-month grace period is over.
- Departing AZA Regional Studbook Keepers are required to uphold Studbook and Animal Program business confidentiality and provide all relevant AZA Regional Studbook documents to the TAG Chair and their replacement.
- AZA Regional Studbook Keepers who do not resign under these conditions will be removed by the TAG.
- Studbook keeper access in ZIMS for Studbooks will be removed upon the studbook keeper’s end date.

### **Member Facility Loss of Accreditation/Certification**

- If an AZA Regional Studbook Keeper's facility loses accreditation or certification, they must communicate this to the TAG and AZA CMWS Department via email to [animalprograms@aza.org](mailto:animalprograms@aza.org).
- AZA Regional Studbook Keepers have 6 months to re-gain employment with another AZA member facility before they must surrender their position.
- Departing AZA Regional Studbook Keepers are required to uphold Studbook and Animal Program business confidentiality and provide all relevant AZA Regional Studbook documents to the TAG Chair and their replacement
- AZA Regional Studbook Keepers who do not resign under these conditions will be removed by the TAG.
- Studbook keeper access in ZIMS for Studbooks will be removed upon the studbook keeper's end date.

### **Resignation**

- AZA Regional Studbook Keepers must provide a written notice of resignation to the TAG Chair (or the APM Committee Vice Chair for SSPs & Studbooks if the TAG does not have a current TAG Chair) and AZA CMWS Department via email to [animalprograms@aza.org](mailto:animalprograms@aza.org).
- A planned resignation date may be identified to allow for an election and the mentoring of a new Studbook Keeper. This process must be discussed with the TAG to ensure consistency. Two individuals may not be designated as the Studbook Keeper for a program at the same time.
- Studbook keeper access in ZIMS for Studbooks will be removed upon the studbook keeper's resignation date, or sooner, if a new AZA Regional Studbook Keeper has been identified.
- Departing AZA Regional Studbook Keepers are required to uphold Studbook and Animal Program business confidentiality and provide all relevant AZA Regional Studbook documents to the TAG Chair and their replacement.

### **Removal**

- If a Studbook Keeper is removed by the TAG or the APM Committee, the position must be advertised, and the TAG will select a Studbook Keeper from the pool of applicants if the TAG has an approved RCP. If the TAG does not have a current, approved RCP, the APM Committee will select the new Studbook Keeper.

### Changing a Regional Studbook to an International Studbook

AZA Regional Studbook Keepers may apply to make their AZA Regional Studbook international in scope after discussions with the associated TAG and their PMC Population Biologist or Adjunct Population Biologist.

- The AZA Regional Studbook should be published at least once before international status is considered.
- To request conversion of an AZA Regional Studbook to become an International Studbook, AZA Regional Studbook Keepers must complete a Regional to International Studbook Application and submit it to the APM Committee Vice Chair for SSPs & Studbooks, with a copy sent to the TAG Chair, and the AZA CMWS Department.
- Although the APM Committee does not approve International Studbooks, the APM Committee Vice Chair for SSPs & Studbooks will present the application for International Studbooks from AZA Regional Studbook Keepers to the APM Committee for review and endorsement.
- If endorsed by the APM Committee, the APM Committee Chair will send the endorsement to the AZA Regional Studbook Keeper.
- It is the AZA Regional Studbook Keeper's responsibility to apply for an International Studbook through WAZA's Committee for Population Management (CPM), and communicate back to the TAG and the AZA CMWS Department.
- The WAZA CPM accepts the overall responsibility for International Studbooks. The International Studbook Keepers from AZA member facilities also usually serve as the AZA Regional Studbook Keeper for that species. Resources for International Studbook Keepers are available in the WAZA Resource Manual for International Studbook Keepers.
- International Studbook Keepers from AZA member facilities must meet the same accountability requirements as AZA Regional Studbook Keepers for the regional population.

### AZA Regional Studbook Keeper Accountability

#### Population Management 1 Course

- All AZA Regional Studbook Keepers are required to take the AZA Professional Development Course "Population Management 1 (PM1): Data Management and Processing" within 2 years of becoming the AZA Regional Studbook Keeper.
- PM1 teaches the critical skills needed to update and maintain a population database for a single AZA population. AZA Regional Studbook Keepers learn how to use the necessary software, cope with unique data entry situations, summarize data in the Studbook database, and calculate basic life history parameters.
- For more information on how to register for Professional Development courses, contact the AZA Professional Development Department, [azatraining@aza.org](mailto:azatraining@aza.org).
- AZA Regional Studbook Keepers are encouraged to take "Population Management 2 (PM2): Data Analysis and Breeding Recommendations," which teaches the integration of

demography, genetics, and husbandry to set population goals and make breeding and transfer recommendations for zoo and aquarium populations. PM2 also teaches the management skills needed for coordinating AZA Animal Programs.

### **AZA Regional Studbook Accountability Requirements**

- Beginning in 2021, all AZA Regional Studbooks and International Studbooks must be maintained in the ZIMS for Studbooks software database. Any exception to this must be requested by the associated TAG and be approved by the APM Committee with input from the AZA CMWS Department and PMC.
- An up-to-date AZA Regional Studbook database must be available to the SSP Program's Population Advisor (PMC or PMC Adjunct) prior to each formal population planning meeting, or as needed for AZA population management purposes.
- A complete, current AZA Regional Studbook publication must be submitted to the AZA CMWS Department for publication on the AZA website within 12 months of completing the PM1 course, in accordance with the requirements outlined in Chapter 5 of this AZA Regional Studbook Keeper Handbook.
  - If the Studbook Keeper has not taken PM1 prior to submitting an initial AZA Regional Studbook, the Studbook Keeper must identify to the AZA CMWS Department that they have a skilled mentor (TAG and APM Committee approved) that guided them through the process.
- A complete, current AZA Regional Studbook publication must be submitted to the AZA CMWS Department for publication on the AZA website at least every 3 years in accordance with the current date listed on the front cover of the previous Studbook publication; however annual updates are preferred.

### **International Studbook Keepers Employed by AZA Member Facilities**

International Studbook Keepers are overseen by the WAZA CPM. However, AZA SSP Programs rely on data contained within these International Studbooks for AZA regional population planning. International Studbooks may not be sufficiently up to date for all regions and, therefore, may not be useful for regional population management. For this reason, it is important and practical that, if the International Studbook Keeper is employed by an AZA member facility, they also act as the AZA Regional Studbook Keeper and maintain a regional dataset for that population. International Studbook Keepers employed by AZA member facilities:

- Must keep data current for both their AZA Regional Studbook and International Studbook.
- Must keep their AZA regional data current and ready for population management purposes and adhere to the same accountability requirements as AZA Regional Studbook Keepers for the AZA regional components of their International Studbook.
- Must meet the AZA Regional Studbook Accountability Requirements defined in the section above, which will be enforced by the APM Committee, for the AZA Regional Studbook data.

- Must meet the criteria for data collection and publication of International Studbook data as outlined by WAZA.

### Automated Accountability Emails

Automated deadline reminders are emailed as a courtesy to remind the AZA Regional Studbook Keeper, and other associated parties, of an upcoming studbook publication deadline. Each email includes the appropriate instructions, relevant contact information, and links to the [Deadline Information](#) pages on the AZA website. These automated emails are administered as follows:

Prior to reaching the accountability deadline:

- One year prior, and 6 months prior to the deadline - Sent to the:
  - AZA Regional Studbook Keeper
  - TAG Chair
  - AZA CMWS Department.
- One month prior - Sent to the:
  - AZA Regional Studbook Keeper
  - TAG Chair
  - Institutional Liaison
  - APM Committee Chair
  - APM Committee VC of SSPs and Studbooks
  - APM Committee Liaison
  - AZA CMWS Department.

Upon reaching the accountability deadline and after:

- Deadline Reached- Sent to the:
  - AZA Regional Studbook Keeper
  - TAG Chair
  - Institutional Liaison
  - APM Committee Chair
  - APM Committee VC of SSPs and Studbooks
  - APM Committee Liaison
  - AZA CMWS Department.
- Two weeks past - Sent to the:
  - AZA Regional Studbook Keeper
  - TAG Chair
  - Institutional Liaison
  - APM Committee Chair
  - APM Committee VC of SSPs and Studbooks
  - APM Committee Liaison
  - AZA CMWS Department.



## **Extension requests**

### Prior to the accountability deadline date:

- The AZA Regional Studbook Keeper may request an extension to complete their AZA Regional Studbook report prior to the due date by contacting their TAG Chair, if the TAG has a current, approved RCP.
- If deemed appropriate, the TAG Chair must contact the AZA CMWS Department with the approved new deadline.
- If the TAG does not have a current, approved RCP, the AZA Regional Studbook Keeper must also contact the APM Committee Vice Chair for SSPs & Studbooks to request an extension.
  - If deemed appropriate, the TAG Chair must contact the APM Committee Vice Chair for SSPs & Studbooks and the AZA CMWS Department with the proposed new deadline.
- The APM Committee Vice Chair will work with the APM Committee to approve/not approve the extension request and communicate the decision to the TAG Chair and AZA Regional Studbook Keeper.

### After the accountability deadline has passed:

- If the AZA Regional Studbook extension request was not made prior to the AZA Regional Studbook deadline but the AZA Regional Studbook Keeper wishes to maintain their position, the IL or Director of the AZA Regional Studbook Keeper's facility must **REPLY ALL** to the automated accountability deadline email within 2 weeks of the missed deadline to discuss the reason for the missed deadline, and request a new deadline.
- The APM Committee Vice Chair for SSPs & Studbooks will determine if the reason for the missed deadline for the completion of the AZA Regional Studbook is valid, and if so, a new deadline will be set. They may discuss the situation with the APM Executive Committee, TAG Liaison or others as needed.
- The Vice Chair and APM Committee may consider previous extension requests, ongoing issues with the Program or Studbook Keeper or other concerns in considering extensions. These issues may further be discussed with the TAG Chair. In some cases, the Studbook Keeper may be asked to resign their role.

## Chapter 5. AZA Regional Studbook Publications

### Scope

Typically, the scope of an AZA Regional Studbook report must include pedigree and demographic data about the entire living and historic population, including, but not limited to, all animals currently living in AZA member facilities, approved Sustainability Partners, and all of their ancestors back to the founder animals.

- AZA Regional Studbook Keepers who are responsible for species that have exceptionally large numbers of historical individuals unrelated to the living population, however, may be able to limit the scope of their AZA Regional Studbook.
- The decision to limit the scope of the AZA Regional Studbook to this level must only be made after consultation with, and approval by, the APM Committee, PMC/Adjunct Advisor, SSP Coordinator (if not the AZA Regional Studbook Keeper), and TAG Chair.
- If the scope is limited, the limiting conditions (e.g., all animals living as of 1 January 2000, their ancestors back to founder animals, and all of their descendants) must be clearly indicated within the Studbook report (i.e., in Species Notes in ZIMS for Studbooks software).

### Required Elements

The AZA Regional Studbook publication must be submitted to the AZA CMWS Department for publication on the AZA website in a PDF version. A [Studbook template](#) can be found on the AZA website. See “How to Publish a Studbook Using ZIMS for Studbooks” for [Word](#) or [Mac](#) for details on publishing with ZIMS for Studbooks. The Studbook report submitted to meet accountability requirements must include the items listed below; any alterations to these requirements must be discussed with the AZA CMWS Department.

- A cover page that includes essential information such as the species common and scientific names, AZA Regional Studbook Keeper name and contact information, picture of the AZA Regional Studbook species, date through which the data are current, publication date.
- A Table of Contents that details all of the items below.
- Any necessary citations for photographs and data.
- Currently Living Population - sorted by facility.
- A ZIMS for Studbooks export with date filters set from previous studbook publication date to currentness date and sorted by studbook number.
- Data field descriptions (e.g., descriptions of F.M.U for sex, WILD, UNK, MULT parent ID).
- Data conventions (e.g., what does hatch date represent? What date estimates are used?). Many standard conventions have been developed by AZA population advisors and are outlined in the “[Guidelines for Data Entry and Maintenance of North American Regional Studbooks](#)”.
- An AZA Regional Studbook Disclaimer (see below).

### Optional Elements

The Studbook submitted may include:

- Historical Population information.
- A List of Historical Facilities.

- Relevant husbandry information.

### Publication

- The publication of an AZA Regional Studbook report is a required element to meet accountability deadlines as well as to disseminate information regarding the population. The electronic publication of an AZA Regional Studbook publication allows updates to be produced quickly and with minimal resources.
- The APM Committee requires that AZA Regional Studbook publications be published electronically (as a PDF) on the AZA Regional Studbooks Program page in the [Animal Programs Database](#) section of the AZA website. Please email the report to the AZA CMWS Department ([animalprograms@aza.org](mailto:animalprograms@aza.org)) for posting on the AZA website. Publishing the completed AZA Regional Studbook publication prior to or on the due date will fulfill the AZA Regional Studbook Keeper's accountability requirements.
- When any AZA Regional Studbook (or International Studbook) is published on the AZA website, an automated email is sent to the AZA Regional Studbook Keeper and the TAG Chair notifying them of its publication, and its publication will be announced in the Animal Programs Update.
- See "How to Publish a Studbook Using ZIMS for Studbooks" for [Word](#) or [Mac](#) for details on publishing AZA Regional Studbooks using ZIMS for Studbooks.

### AZA Regional Studbook Disclaimer

Copyright (**publication date**) by (**Studbook Keeper's facility name**). All rights reserved. No part of this publication may be reproduced in hard copy, machine-readable or other forms without advance written permission from the (**Studbook Keeper's facility name**). Members of the Association of Zoos and Aquariums (AZA) may copy this information for their own use as needed.

The information contained in this studbook has been obtained from numerous sources believed to be reliable. This studbook may contain husbandry information, but this document does not qualify as an official AZA Animal Care Manual (ACM). AZA and the (**Studbook Keeper's facility name**) make a diligent effort to provide a complete and accurate representation of the data in its reports, publications, and services. However, AZA and the (**Studbook Keeper's facility name**) do not guarantee the accuracy, adequacy, or completeness of any information. AZA and the (**Studbook Keeper's facility name**) make no warranties or representations of any kind, express or implied, including but not limited to warranties of merchantability of fitness for particular purpose. AZA and the (**Studbook Keeper's facility name**) disclaim all liability for errors or omissions that may exist and shall not be liable for any incidental, consequential, or other damages (whether resulting from negligence or otherwise) including, without limitation, exemplary damages or lost profits arising out of or in connection with the use of this publication.

Because the technical information provided in the studbook can easily be misread or misinterpreted unless properly analyzed, AZA and (**Studbook Keeper's facility name**) strongly recommend that users of this information consult with the Studbook Keeper in all matters related to data analysis and interpretation.

## Chapter 6. Program Leader Resources

### Animal Programs Contact Information

Contact information for groups involved in AZA's Animal Programs can be found [here](#)

### AZA CMWS Department

Please visit [AZA's staff webpage](#) for further information about the CMWS staff. Contact information can be downloaded [here](#).

### Animal Population Management Committee

Please visit AZA's [Animal Population Management Committee](#) webpage for a current list of committee members and advisors. Contact information and TAG Liaison assignments can be downloaded [here](#).

### AZA Taxon Advisory Group Chairs

A current list of TAG Chairs and contact information can be downloaded [here](#).

### AZA Population Management Center

Please visit [PMC's webpage](#) for further information about the PMC staff. Contact information can be downloaded [here](#).

### AZA Small Population Management Advisory Group

Description for the role of Small Population Management Advisory Group TAG Liaisons and current SPMAG TAG Liaison assignments can be downloaded [here](#).

### AZA Reproductive Management Center

Please visit [RMC's webpage](#) for further information about the RMC staff. Contact information can be downloaded [here](#).

## AZA Web Resources

### **AZA Board Approved Policies**

Find Board Approved Policies and Position Statements [here](#).

### **Animal Exchange**

To access *Animal Exchange*, the user must be logged in to the AZA website and have Animal Exchange privileges assigned to your individual record in order to use this feature. Never share your log-in information with anyone as you will directly be held responsible for any changes or edits made to secured areas. Once logged in, the Animal Exchange link can be found [here](#).

### **Animal Programs Database**

The Animal Programs Database contains all Animal Program Data, and is separated out into Animal Program pages. There are separate pages for TAGs, SSP Programs, Studbooks and SAGs. Each Animal Program page can be accessed by going through the:

#### **Animal Program Page Search Portal**

Find the Animal Program Page Search Portal [here](#).

Each Animal Program page contains the following (\*information only available if logged in):

- Program Leaders, Officers, Advisors
- Program Leader, Officers, Advisors contact information\*
- Animal Program details (start dates, websites, etc.)
- Animal Program Species
- Related Animal Programs
- Animal Program Documents\*
- Animal Program IR list\*

### **SSP Sustainability Reports and Search Portal**

Find the SSP Sustainability Reports and Search Portal [here](#).

The SSP Sustainability Reports summarize SSP species' basic care, exhibit design, and population management considerations and priorities. The Search Portal automatically generates these reports which allow collection planners to perform searches that identify appropriate species for their collection planning criteria, while also directing resources and attention to managed species. The SSP Sustainability Reports and Search Portal were designed as a member service for collection planners, Program Leaders, ILs, IRs, research scientists, and other zoo and aquarium staff. Access is available for staff at AZA-accredited facilities and Certified Related Facilities.

### **Animal Programs Resources**

The [Animal Programs Resources](#) page contains numerous links, documents and templates aimed to assist Program Leaders. These include:

- Program Leader Handbooks
- Animal Program Applications

Resource Documents (including templates, guides, and resources related to being a new Program Leader, assessing Sustainability Partners, TAG strategic planning, PVA FAQs, and maintaining Studbooks)

Contact information for TAGs Chairs, Institutional Liaisons, APM Committee TAG Liaisons, SPMAG TAG Liaisons

Animal Program *Sustainability Designations* (updated quarterly)

Animal Programs Monthly Update

Current Program Leader Vacancies

Illustrative protocols to help Program Leaders navigate the Animal Programs Database

Recorded webinars

### **Accountability Information and Instructions**

Find Accountability Information and Instructions [here](#).

### **PMCTrack**

Website: [www.pmctrack.org](http://www.pmctrack.org); Email: [pmctrack@lpzoo.org](mailto:pmctrack@lpzoo.org)

PMCTrack evaluates breeding and transfer recommendations to:

Determine whether each recommendation occurred based on studbook data

Collect reasons from Institutional Representatives for recommendations not occurring as planned

Improve management of AZA's Animal Programs and increase long-term viability of these populations

### **The AZA Population Management Center (PMC)**

Website: <http://www.lpzoo.org/population-management-center>; Email: [pmc@lpzoo.org](mailto:pmc@lpzoo.org)

The AZA PMC, hosted by the Lincoln Park Zoo in Chicago, Illinois, was established in 2000 to provide scientific guidance to AZA Program Leaders by conducting demographic and genetic analyses and preparing Breeding and Transfer Plan with SSP and SAFE Programs. The AZA PMC also includes Adjunct Population Biologists based at and supported by various AZA-related facilities. For more information on the PMC, Adjuncts, and its role in AZA Animal Programs see the SSP and AZA Taxon Advisory Group Handbooks as well as the SAFE handbook.

### **AZA PMC Functions**

PMC staff provide many services for AZA Animal Programs including:

- Producing Breeding and Transfer Plans (BTPs) with all SSP Programs and those SAFE Programs that are approved to receive this support
- Researching unknown or partially-known pedigrees
- Creating analytical assumptions for AZA Regional Studbooks
- Conducting and/or supporting population biology-related research
- Supporting software development to improve methods of population management
- Advising on data conventions and entering abnormal data
- Troubleshooting problems with population management software (e.g., PopLink, PMx, ZIMS for Studbooks, PMCTrack).
- Maintaining the Survival Statistics database and AZA web page.

- Supporting International Studbook Keepers and GSMPs for Conveners based in the AZA region
- Teaching AZA Program Leaders in AZA Population Management I and II courses
- Assisting AZA Regional Studbook Keepers with AZA Regional Studbook publication
- Assisting with SSP assessments as part of the TAG's RCP process

### **AZA PMC Animal Program Population Biologists**

AZA Animal Program Population Biologists fall into two APM Committee approved categories:

- PMC Population Biologists are employed by and working at the AZA Population Management Center at Lincoln Park Zoo.
- PMC Adjunct Population Biologists are trained by the PMC, have a signed MOU with the PMC and AZA office, and should be paid employees at an AZA member facility (AZA-accredited facility, Certified Related Facility, Society Partner, and Conservation Partner). Most often, Adjuncts are responsible for advising the AZA Animal Programs that have Program Leaders (PLs) based at their supporting facility/facilities. There are a few exceptions to this, which must be discussed with and approved by both the Adjunct's supervisor and AZA PMC Director.

The AZA PMC Director is responsible for assigning and reviewing AZA Animal Program advising assignments for all Population Biologists. These assignments always consider:

- a) SSP or SAFE Coordinator's hosting facility and if this is an Adjunct's supporting facility
- b) Studbook Keeper's hosting facility and if this is an Adjunct's supporting facility
- c) Adjunct existing agreements with their supporting facilities
- d) Population Biologist's experience and history with the SSP or SAFE Program and TAG
- e) Population Biologist's experience and history with the taxonomic group
- f) Population Biologist's experience with any other specific factors for the SSP or SAFE Program (e.g., reintroduction species, conducting molecular genetics research)
- g) Population Biologist's time availability within their schedule as well as during the timeframe in which the SSP or SAFE Program needs advising

If a Program Leader wants to change Population Biologists, the Program Leader is encouraged to first have a one-on-one conversation with the Population Biologist and if needed, reach out to the AZA PMC Director for additional discussion. These requests will be carefully considered, mediation used if necessary, and additionally include all the same variables listed above. More information on the PMC can be found on the PMC page of the [Lincoln Park Zoo website](#) or the [AZA website](#).

### **The AZA Reproductive Management Center**

Website: <https://www.stlzoo.org/animals/scienceresearch/reproductivemanagementcenter/>;

Email: [contraception@stlzoo.org](mailto:contraception@stlzoo.org)

The mission of the AZA Reproductive Management Center (RMC) is to provide science-based information to AZA facilities on reproductive management to support animal population viability and sustainability. The RMC includes scientists, veterinarians, and animal managers

with research and management expertise in wildlife contraception as well as methods for improving reproductive success. The AZA RMC and the EAZA Reproductive Management Group, our European counterpart, jointly manage a Contraception Database which contains over 50,000 records of animals treated with contraception. The RMC uses these data to make taxon- and species-specific contraceptive recommendations and provide advice on the safety, effectiveness, and reversibility of these contraceptive products. AZA institutions can use these recommendations to make informed decisions on how to sustainably manage their animal collections. Contraception is an essential, proven, and humane tool for reproductive management while still allowing individuals to live in natural social and family groups. It allows managers to maximize available space by preventing births from animals that are not high priorities for breeding or animals that are not currently recommended for breeding, but will be in the future.

[Contraceptive recommendations](#) are available at the Saint Louis Zoo website.

The RMC also organizes workshops, creates demonstration videos, and carries out research projects on topics related to increasing reproductive success, addressing infertility and mate compatibility, as well as contraception. We carry out Reproductive Viability Analyses (RVAs) that seek to identify what inherent biological and reproductive characteristics of animals in breeding pairs and the pairs themselves correlate with successful reproduction. We also collaborate with SSP Coordinators to carry out a variety of multi-institutional research projects focused on contraceptive efficacy and/or reversibility, reproductive suppression, and reproductive health.

The RMC relies on feedback from the zoo community to improve reproductive management. While safety and efficacy are vital components of a contraceptive suitable for zoo animals, reversibility is the third integral element that has far-reaching consequences for sustainable population management. The RMC's goal is to produce reversibility data for different contraceptives so that managers are well-informed and know what to expect from a particular product. These are often the most challenging data to collect because pregnancies and births can occur years after treatment or at a different facility than the one at which the contraceptive was administered. It is essential that details be reported, not only during treatment to obtain efficacy parameters, but also after treatment is stopped and breeding is desired. The RMC asks that animal managers notify the vet staff or whomever is responsible for updating the [contraception website](#) at their institution to let us know when animals are given mate access following contraception and when births occur throughout the year so they can use this information to update to the contraception website. The RMC can be reached by emailing [contraception@stlzoo.org](mailto:contraception@stlzoo.org).



## **ZIMS for Studbooks**

Website: <https://zims.species360.org/>

Email: [support@species360.org](mailto:support@species360.org)

ZIMS for Studbooks is an online database where Studbook Keepers maintain and track their studbook databases.

Resources:

- [A Reference Guide to ZIMS for Studbooks for Animal Program Leaders](#)
- [Starting a New AZA Studbook in ZIMS for Studbooks](#)
- [AZA Guidelines for I. Roles and Access to ZIMS for Studbooks, and II. Sharing Studbook Data](#)
- [Working Together in a Shared Studbook Database](#)

## Glossary

**Accountability-** Accountability refers to the processes by which Animal Program participants including Program Leaders, Institutional Representatives (IRs), and Institutional Liaisons (ILs) are responsible for producing and reviewing documents, and communicating among appropriate individuals. Accountability of Animal Programs includes meeting deadlines, requesting extensions if needed, maintaining communication with all individuals, and adhering to the AZA's Full Participation Policy and the Species Survival Plan® Animal Management Reconciliation Policy.

**Advisor-** An advisor is a non-voting participant of an AZA Animal Program (AP) that provides advice to the AP in their efforts to identify, develop and implement goals related to their species. An advisor may also provide input on Animal Care Manuals and assist with the development of education materials and research projects related to the Advisor's area of expertise.

**Animal Care Manuals (ACMs)-** Animal Care Manuals (ACMs) are a compilation of animal care and management knowledge that has been gained from recognized species experts, including AZA Taxon Advisory Groups (TAGs), Species Survival Plan® Programs (SSPs), biologists, veterinarians, nutritionists, reproduction physiologists, behaviorists and researchers. Content is based on the current science, practice, and technology of animal management. The manual assembles best practices, animal care recommendations and AZA accreditation standards to maximize capacity for excellence in animal care and welfare and is updated every 5 years. All ACMs are peer reviewed, widely valued, and acclaimed by other regional associations. All TAGs are required to coordinate the publication of ACMs for the taxa within their purview.

**Animal Exchange-** The Animal Exchange allows representatives from AZA-Accredited Facilities, Certified Related Facilities and Approved Non-Member Participants to list and search for individuals of a species that can be exchanged to meet the goals of their Institutional Collection Plan (ICP) or the Regional Collection Plan (RCP).

**Animal Population Management Committee (APM Committee)-** The Animal Population Management Committee (APM Committee) works collaboratively with other Committees and is responsible for facilitating the professional and scientific management of the animals cared for in AZA-Accredited zoos and aquariums, Certified Related Facilities, and Approved Non-Member Participants. Committee members serve up to two three-year terms and consist of Directors, Vice Presidents (VPs), curators, and registrars. APM Committee develops, oversees, promotes, evaluates, and supports the cooperative animal management, conservation, sustainability, and scientific initiatives of the AZA.

**Animal Population Management Committee (APM Committee) Liaison-** Each Taxon Advisory Group (TAG) is assigned one member of the Animal Population Management Committee (APM Committee) who serves as a liaison for that TAG. APM Committee members typically serve as a liaison for 3 TAGs. They communicate with the TAG regularly and serve a crucial advisory role for any policy, procedure, or processes questions the TAG may have, and act as the primary contact and mentor during the TAG's Regional Collection Plan (RCP) developmental and review process.

**Animal Programs Database-** The AZA Animal Programs Database allows anyone to access general information about AZA's Taxon Advisory Groups (TAGs), Species Survival Plan® (SSP) Programs, Studbooks, the individual species included in these AZA Animal Programs (APs), and view Program Leader, Officer and Advisor contact information. AZA members can log in to the

AZA Animal Programs Database to gain access to more detailed AP information and have the ability to download Institutional Representative (IR) lists and associated final and draft documents.

**Animal Program Summary Table-** Animal Program Summary Table identifies each AZA Animal Program (AP) (Species Survival Plan® (SSP) Programs and Studbooks) recommended by the TAG for cooperative management. The following information is included for each AP: the date of the last Breeding and Transfer Plan; the current population size, current gene diversity, designation, and target population size; the number of additional spaces needed to achieve the target population size; and the 5-year population trend, conservation status, and top three goals. This table must be updated as APs are analyzed by the Population Management Center (PMC), a PMC Adjunct or an approved Small Population Management Scientific Advisory Group (SPMAG) Advisor, and is a required component of the TAG Annual Report and the TAG's Regional Collection Plan (RCP).

**Association of Zoos and Aquariums (AZA)-** Founded in 1924, the Association of Zoos and Aquariums (AZA) is a nonprofit organization dedicated to the advancement of accredited zoos and aquariums in the areas of animal care, wildlife conservation, education and science. AZA is America's leading accrediting organization for zoos and aquariums and accredits only those facilities that have achieved rigorous standards for animal care, education, wildlife conservation and science.

**AZA Animal Program-** AZA Animal Programs (APs) include Taxon Advisory Groups (TAGs), Species Survival Plan® (SSP) Programs and Studbook Programs. APs are responsible for the extraordinary leadership, development, oversight, promotion, evaluation and support of AZA's cooperative animal management, conservation, and scientific initiatives. Management tools, databases, reference materials, policies, and management plans have been developed to facilitate exceptional AP collaboration within and amongst AZA-accredited facilities.

**AZA Brand/Branded** The signature for the Association of Zoos & Aquariums is a unique piece of artwork that has been designed specifically for our brand. Consisting of the AZA wordmark and the AZA ampersand symbol, the signature is an extremely valuable asset and the most concise visual representation of our brand.

**AZA Board Approved Policies-** AZA policies may be drafted by AZA Committees, Scientific Advisory Groups (SAGs), and Animal Programs (APs) in collaboration with their AZA Staff and Board Liaisons but all AZA-related policies must be approved by the AZA Board of Directors before being finalized, published, or distributed. AZA policies may cover topics such as animal management, animal programs, conservation, ethics, health, husbandry and welfare, research and technology, and safety.

**AZA Dedicated Funds Account-** AZA Committees, Scientific Advisory Groups (SAGs), Taxon Advisory Groups (TAGs), Species Survival Plan® Programs, and SAFE Species Programs who hold and distribute money raised specifically to support projects initiated or coordinated by their group must use an AZA Dedicated Funds to manage all transactions.

**AZA Mission-** The Association of Zoos & Aquariums (AZA) provides its members the services, high standards and best practices needed to be leaders and innovators in animal care, wildlife conservation and science, conservation education, the guest experience, and community engagement.

**AZA Network-** The Association of Zoos & Aquariums' online private social networking tool.

**AZA Policy for Full Participation-** AZA policy stating that all AZA-accredited facilities and Certified Related Facilities having a Green SSP animal in their collection are required to participate in the collaborative SSP planning process (e.g., provide relevant animal data to the AZA Studbook Keeper, assign an Institutional Representative (IR) who will communicate institutional wants and needs to the SSP Coordinator, comment on the draft plan during the 30-day review period, and abide by the recommendations agreed upon in the final plan). All AZA member facilities and Animal Programs (APs), regardless of management designation, must adhere to the AZA Policy on Responsible Population Management, as well as the AZA Code of Professional Ethics.

**AZA Strategic Plan-** AZA accredited zoos and aquariums will be recognized for leading a compelling wildlife conservation movement. We will achieve this by caring for wildlife and wild places; educating and engaging public, professional and government audiences; serving and increasing membership; and developing a robust and sustainable economic model which empowers AZA to provide superlative member services.

**Breeding and Transfer Plans-** Breeding and Transfer Plans (BTPs) summarize the current demographic and genetic status of a Species Survival Plan® (SSP) Program, describe the SSP Program management designation, and recommend breeding pairs and transfers. Breeding and Transfer Plans are designed to maintain a healthy, genetically diverse and demographically stable population.

**Certified Related Facilities-** Organizations holding wildlife that are not commercial entities, and are not open to the public on a regularly scheduled, predictable basis. The facility shall be under the direction of a professional staff trained in animal husbandry, and shall be further defined as having conservation and preservation as part of its mission—a mission that shall have a beneficial, tangible, supportive impact on the zoological and aquarium professions. This includes wildlife ranches, wildlife refuges or rehab centers, research facilities, survival centers, breeding farms, and/or similar organizations.

**Conservation Grants Fund (CGF)** - Established in 1984, CGF supports the cooperative conservation-related scientific and educational initiatives of AZA and AZA-accredited zoos and aquariums and their collaborators. CGF grants are awarded in six categories: Animal Health, Animal Welfare, Conservation Education, Field Conservation and/or Reintroduction, Management and/or Breeding, Research.

**Conservation, Management, and Welfare Sciences (CMWS)-** The Conservation, Management, and Welfare Sciences Department (CMWS) of Association of Zoos and Aquariums (AZA) is committed to providing services advancing the initiatives of member institutions related to conservation, animal management, and animal welfare.

**Conservation Partner-** Organizations that support the vision, mission and goals of zoos and aquariums. Conservation Partners represent AZA-Accredited Facility member societies and associated organizations, professional societies, conservation organizations, universities, some government entities and other non-profits.

***Ex situ* Conservation-** Preservation of species outside of their native habitat.

**Global Species Management Plan (GSMP)-** GSMPs are formal, international population management plans among a minimum of two regional zoological associations, and are overseen by WAZA. GSMPs are a valuable partnership when population goals for increasing sustainability

cannot be met within a single region. A GSMP provides an opportunity to combine several regional populations, thus improving the genetic and demographic management potential by increasing the population's size, carrying capacity, and other resources.

**International Studbook-** The World Association of Zoos and Aquariums' (WAZA) Committee of Population Management (CPM) administers and provides oversight to International Studbooks. International Studbooks provide a valuable service to the zoological community by offering the most complete and accurate global data on the *ex situ* population's pedigree and demography, if possible including husbandry and veterinary guidance, and enhancing management of the *ex situ* population through analysis of the International Studbook data.

**In situ Conservation-** Preservation of natural communities and populations of species in the wild.

**Institutional Liaison (IL)-** The Institutional Liaison (IL) assures that there is effective communication and participation between the facility and AZA's Animal Programs (APs). The IL designates Institutional Representatives (IRs), keeps the facility's IR list current, and is responsible for updating IR contact information on the AZA website. The IL serves as the default IR for any AP which does not have an IR assigned and is required to respond accordingly. The IL works with Program Leaders and IRs to assure that their facility fully participates in all associated Taxon Advisory Groups (TAGs) and Species Survival Plan® (SSP) Programs, and if necessary, will meet in conflict resolution processes.

**Institutional Representative (IR)-** The Institutional Representative (IR) is the primary contact between their facility and the Program Leader of the Animal Programs (APs) to which s/he has been designated. The IR is responsible for maintaining open communication between the AP and the facility, communicating to the Program Leader on behalf of the facility, and participating in the AP communications and activities.

**Management Group-** At a minimum, the Management Group is composed of the Coordinator, Vice Coordinator, and AZA Regional Studbook Keeper. The Management Group serves as the voting body for Species Survival Plan® (SSP) Program business and all members are integrally involved in the SSP Program appointments, publications, and meetings. Management Group members must be elected from the SSP Program's Institutional Representative (IRs).

**MateRx-** The primary output is a matrix of genetic ratings for every possible breeding pair in a population which allow Program Leaders to quickly discover how the genetic status of animals in their collections compare to the rest of a managed population. Note that this does not include any demographic, logistic, or other variables that should be considered when recommending breeding.

**Monthly Animal Programs Update-** AZA's Monthly Animal Programs Update contains information about the most recent news pertaining to Animal Programs (APs), Professional Development Courses, workshops, conferences, meetings, funding and award opportunities, new Program Leaders, Program Leader vacancies, new publications, and information regarding Breeding and Transfer Plans.

**Officer-** Officer positions for an Animal Program (AP) include the Program Leader Taxon Advisory Group (TAG) Vice Chair or Species Survival Plan® (SSP) Program Vice Coordinator, TAG or SSP Secretary, and if any financial components are incorporated into the Animal Program, a TAG or SSP Treasurer. Officers, with the exception of the TAG Chair or SSP Coordinator, are

elected from the TAG Steering Committee or SSP Management Group and the Steering Committee/Management Group forms the electorate for that vote.

**PMC Adjunct-** PMC Adjunct Population Biologists are advisors that are approved by AZA and advise AZA Animal Programs from their home institutions. PMC Adjuncts provide many services for AZA Animal Programs including producing Breeding and Transfer Plans, providing informal genetic or demographic advice between plans, investigating unknown or partially-known pedigrees, developing pedigree assumptions and creating analytical studbooks, conducting research and helping to develop software to improve methods of population management, and troubleshooting software problems.

**PMCTrack-** PMCTrack is a web-based database and monitoring system designed to evaluate the outcomes of breeding and transfer recommendations made through the AZA Animal Programs (APs) such as Species Survival Plan® (SSP) Programs. PMCTrack provides the necessary tools and data to understand, monitor, and improve AZA's cooperative population management system. PMCTrack includes survey functionality to request additional information from institutions on the information needed for preparing for SSP Breeding and Transfer Plans (wants/needs, reasons for unfulfilled outcomes).

**Population Management Center (PMC)-** The [AZA Population Management Center](#) (PMC) hosted by the Lincoln Park Zoo in Chicago, Illinois, as well as San Diego Zoo Global in San Diego, California, is responsible for conducting demographic and genetic analyses needed to develop and distribute population management recommendations for all SSP Programs. PMC staff, including Population Biologists, Planning Coordinator, and Research Assistant, assist each SSP in the development of their population management plans by making sure the data are accurate, determining the current population status, predicting the future population status, identifying specific breeding and transfer recommendations, and distributing the plan to all participating AZA-accredited institutions. In addition, the PMC contributes valuable information for AZA Sustainability Reports and Regional Collection Plans (RCPs).

**Population Sustainability-** Success is achieved when SSP-managed animals are available to meet program goals and animals come from biologically sound populations as a result of a shared commitment to cooperative populations and program management.

**Population Viability Analysis (PVA)-** A PVA is a computer model that projects the likely future status of a population. PVAs are used for evaluating long-term sustainability, setting population goals, and comparing alternative management strategies. Several quantitative parameters are used in a PVA to calculate the extinction risk of a population, forecast the population's future trajectory, and identify key factors impacting the population's future.

**Program Leader-** Program Leaders include Taxon Advisory Group (TAG) Chairs, Species Survival Plan® (SSP) Program Coordinators, AZA Regional Studbook Keepers, and Candidate Program Leaders.

**Provisional SSP-** Provisional SSP- A Provisional SSP Program is a population that is a priority for AZA members, but does not currently meet the definitions of viability and sustainability defined by the AZA Animal Population Management Committee. A Provisional SSP Program meets all of the requirements to become an SSP and does not score a negative in more than two

categories in the SSP Assessment process (Genetics, Demography, Space & Interest, and Husbandry).

**Publish-** An SSP Breeding and Transfer Plan, AZA Regional Studbook, Population Viability Analysis, MateRx, or a TAG Regional Collection Plan is considered published once the document is posted on that Animal Program's page in the AZA Animal Programs Database.

**Regional Collection Plan (RCP)-** Taxon Advisory Groups (TAGs) develop Regional Collection Plans (RCPs) to recommend species for cooperative management among the Association of Zoos and Aquariums (AZA) member institutions, determine the sustainability goals for each recommended Animal Program (AP) within its purview, identify objectives relevant to their long-term collection plans, and assure adherence to AZA's animal management and conservation goals.

**Reproductive Management Center (RMC)-** The [AZA Reproductive Management Center](#) (RMC), hosted by the [Saint Louis Zoo](#), is responsible for assessing factors such as contraception type efficacy, reversibility, and safety; an animal's age, reproductive status, behavioral and social needs, and delivery system practicality when recommending appropriate contraception methods for the animals cared for in AZA-accredited institutions.

**Scientific Advisory Group (SAG)-** Established in 1991, Scientific Advisory Groups (SAGs) help facilitate, support, network and coordinate the relevant research activities of its member institutions. SAGs are made up of experts in a particular field of wildlife science. Members include veterinarians, researchers and zoo- and aquarium-based curators with appropriate scientific training, as well as university, government and other outside scientists with a commitment to sharing their particular expertise.

**Secure SSP-** Programs that meet the Animal Programs Sustainability Criteria for Signature SSP may be considered for Secure SSP. These are programs that we are relatively certain will still be present in AZA facilities in 100 years as a robust, viable, healthy, biologically sound population.

**Signature SSP-** A Signature SSP Program are populations that are considered to be sustainable using robust measures of viability and sustainability defined by the AZA Animal Population Management Committee. A Signature SSP meets all of the requirements to become an SSP, and scores at least two positives and does not score any negatives in the SSP Assessment process (Genetics, Demography, Space & Interest, and Husbandry).

**Small Population Management Scientific Advisory Group (SPMAG)-** A Scientific Advisory Group (SAG) that provides technical advice pertaining to population management for AZA Animal Programs. SPMAG helps advance the science of applied small population biology and develops tools for use by small population managers.

**Species Survival Plan® (SSP) Program-** An AZA Survival Plan® Program (SSP) strives to manage a population with the interest and cooperation of AZA-accredited facilities, and is identified through documented demand and potential sustainability within the AZA community defined by the species being held in at least 15 AZA facilities, the majority (>50%) of individual animals of the managed population is housed in AZA member facilities, Breeding exceeds acquisitions from non-AZA sources, and no external entities, government or otherwise, significantly impact how the animals are managed. An SSP is identified by Taxon Advisory Group (TAG)s during the Regional Collection Plan (RCP) process upon review of the SSP Assessment process; and develops a Breeding and Transfer Plan that identifies population goals and recommendations to manage a genetically diverse, demographically varied, and biologically sound

population. Success is achieved when SSP animals are available to meet program goals and come from biologically sound populations as a result of a shared commitment to cooperative populations and program management. All levels of SSPs are subject to AZA's Full Participation and Sustainability Partner Policies.

**Species Survival Plan® (SSP) Coordinator-** A Species Survival Plan® (SSP) Program Coordinator performs various duties to lead and support the AZA SSP program. The SSP Coordinator works with Institutional Representative (IRs), the AZA Regional Studbook Keeper (if different from the Coordinator), the Taxon Advisory Group (TAG), the Animal Population Management Committee (APM Committee), and the AZA CMWS Department, as well as any associated governmental agencies, to develop, oversee, promote, and support the cooperative animal management, conservation, and research initiatives of the SSP Program. The primary responsibility of the SSP Coordinator is to regularly complete and distribute an SSP Breeding and Transfer Plan for the managed population.

**SSP Sustainability Report-** An automatically generated 5-page report that summarizes husbandry practices, exhibit management, species appeal, educational opportunities, multi-species exhibit considerations, species biology, SSP population dynamics, management priorities, challenges to sustainability, and research needs. The report is a compilation of the SSP Coordinator's expertise and the current and projected population summaries from the SSP Breeding and Transfer Plan or PVA.

**SSP Sustainability Search Portal-** An online tool for collection planners, Program Leaders, ILs, IRs, research scientists, and other zoo and aquarium staff. The searchable format allows collection planning users to perform searches that identify appropriate species for their collection planning criteria, while also directing resources and attention to managed species.

**Statement of Individual Commitment-** A signed statement by the potential new Animal Program (AP) officer to show that the individual is willing and able to meet the commitments and responsibilities of the AP and leading the group in its mission.

**Statement of Institutional Support-** A signed statement by the potential new Animal Program (AP) officer's facility to show that the facility is willing and able to support this individual in meeting the commitments and responsibilities of the AP and leading the group in its mission.

**Steering Committee-** The Steering Committee serves as the voting body for Taxon Advisory Group (TAG) business, and all members are integrally involved in TAG decision making, appointments, publications and meetings. The Steering Committee is composed of 5-15 members, including Officers. Each TAG may determine the optimal size and management of its Steering Committee.

**Studbooks-** An AZA Regional Studbook dynamically documents the pedigree and entire demographic history of each individual in a population of species. These collective histories are known as the population's genetic and demographic identity and are invaluable tools that track and manage each individual cared for in AZA-Accredited Zoos and Aquariums, Certified Related Facilities and by Approved Sustainability Partners as part of a single *ex situ* population.

**Studbook Keeper-** The AZA Regional Studbook Keeper is responsible *for maintaining an accurate record of the histories of all individual animals in an ex situ population.* The AZA Regional Studbook Keeper works directly with the associated Taxon Advisory Group (TAG) and Species Survival Plan® (SSP) Program, all participating AZA member institutions, the Animal



Population Management Committee (APM Committee), Population Management Center (PMC), a PMC Adjunct, or an approved Small Population Management Advisory Group (SPMAG) advisor, and the AZA CMWS Department to complete and distribute a timely and accurate AZA Regional Studbook to be used for demographic and genetic analyses relevant to the SSP Program's population management.

**Sustainability Designations-** An initial Studbook, or a Population Viability Analysis (PVA), Breeding and Transfer Plan, or MateRx determines an Animal Program's (AP's) designation. Sustainability Designations include Secure Species Survival Plan® (SSP) Programs, Signature SSP Programs, and Provisional SSP Programs. This list is updated quarterly on the Association of Zoos and Aquariums (AZA) website.

**Sustainability Partners-** AZA Animal Population Management Committee (APM Committee) approved wildlife facilities that regularly exchange animals with AZA-accredited facilities and certified related facilities, typically as part of the Species Survival Plan® (SSP) Program Breeding and Transfer Plan or other SSP Program management process.

**Target Population Size (TPS)-** The desired number of SSP animals to be held across AZA and approved partner facilities over a specific, stated timeframe. This number is determined with consideration for program roles and goals (genetic, demographic, and others), logistical constraints, spatial competition with other TAG-managed species, and other population-specific concerns. Target Population Size is determined by the Taxon Advisory Group (TAG) and published in their Regional Collection Plan (RCP).

**Taxon Advisory Group (TAG) Annual Report-** Taxon Advisory Group (TAG) Annual Reports update the Animal Population Management Committee (APM Committee) and the Association of Zoos and Aquariums (AZA) CMWS Department on the conservation work of the TAG, and the Animal Programs (APs) within the TAG's purview. TAG Annual Reports provide the Chair an opportunity to document and communicate any potential issues within the TAG's programs, and allow an opportunity for the TAG to submit AP meeting minutes and other materials to AZA on an annual basis. Reports are due to the AZA CMWS Department February 1 of each year.

**Taxon Advisory Group (TAG)-** Established in 1990, Taxon Advisory Groups (TAGs) examine the conservation and management needs of entire taxa, or groups of related species. TAGs establish priorities for management, research, and conservation. TAGs select appropriate species for AZA conservation and management programs and provide a forum for discussing husbandry, veterinary, ethical, and other issues that apply to entire taxa.

**Taxon Advisory Group (TAG) Chair-** The primary responsibility of the Taxon Advisory Group (TAG) Chair is to assure the completion and distribution of a Regional Collection Plan (RCP). Additional responsibilities include leadership of the TAG, organization of its members, oversight and consistent communication with all Animal Programs within the TAG's purview (Species Survival Plan® (SSP) Program, AZA Regional Studbooks, and Candidate Programs), the Institutional Liaisons (ILs), Institutional Representatives (IRs), and reporting to the Animal Population Management Committee (APM Committee). The TAG Chair serves as the primary contact and AZA expert for the taxon and abides by the duties and responsibilities defined for the position.

## AZA Documents

The documents referenced throughout this handbook can be found at the following AZA webpages:

- [Program Leader and Officer Applications](#)
- [“AZA Regional Studbook Keeper Application”](#)
- [“Regional to International Studbook Application”](#)
- [Resource Documents](#)
- [“AZA Communications Guidelines”](#)
- [“Citation Formats”](#)
- [“Guidance for SSP Coordinators and Studbook Keepers on Sharing Studbook Data”](#)
- [“How to Publish a Studbook Using ZIMS for Studbooks \(Mac\)”](#)
- [“How to Publish a Studbook Using ZIMS for Studbooks \(Word\)”](#)
- [“Starting a New AZA Studbook in ZIMS for Studbooks”](#)
- [How to Assign 'View and Export' Access to My Studbook](#)
- [AZA Guidelines for Roles and Access to ZIMS for Studbooks and Sharing Studbook Data](#)
- [ZIMS Institution Studbook Functionality Overview](#)

## Citation Formats

### **Citation of an SSP Breeding and Transfer Plan:**

\*SSP Coordinator should be the first author, then Studbook Keeper, then the Population Biologist.

SSP Coordinator last name, first initial., Studbook Keeper last name, first initial., and Population Biologist last name, first initial. Year published. Species common name (Scientific name). AZA Species Survival Plan® Designation color Program Population Analysis & Breeding and Transfer Plan. AZA Population Management Center: Chicago, IL.

McAuliffe, J., Ross, S., and Andrews, J. 2017. Chimpanzee (*Pan troglodytes*). AZA Species Survival Plan® Green Program Population Analysis & Breeding and Transfer Plan. AZA Population Management Center: Chicago, IL.

### **Citation of a Global Species Management Plan:**

GSMP Coordinator last name, first initial. and Population Biologist last name, first initial. Year published. Species common name (Scientific name) WAZA Global Species Management Plan. Institution name: City, State.

Myers, M., Gardner, L., and Lynch, C. 2018. Blue-crowned Laughingthrush (*Dryonastes courtoisi*). WAZA Global Species Management Plan. Riverbanks Zoo: Columbia, SC.

### **Citation of an AZA Regional Studbook:**

Studbook Keeper last name, first initial. Year published. Species common name (Scientific name) AZA Regional Studbook. Institution name: City, State.

Ross, S. 2015. Chimpanzee (*Pan troglodytes*) AZA Regional Studbook. Lincoln Park Zoo: Chicago, IL.

### **Citation of a ZIMS for Studbooks Database:**

ZIMS for Studbooks for [Scope/taxonomy]. ([Studbook Keeper last name, first initial], [Currentness date of studbook]). Species360 Zoological Information Management System. Retrieved from <http://zims.Species360.org>; [annotation to define filters used].

ZIMS for Studbooks for Curl-crested Aracari (*Pteroglossus beauharnaesii*). (Parotti, F., 14 January, 2019). Species360 Zoological Information Management System. Retrieved from <http://zims.Species360.org>; filter: AZA.

### **Citation of a Regional Collection Plan:**

TAG Chair last name, first initial. Year published. TAG name Regional Collection Plan. Institution name: City, State.

Holmes, C. 2018. Galliformes TAG Regional Collection Plan. Houston Zoo: Houston, TX.

**Citation of a Population Viability Analysis:**

(all Last name, First initial) Population Biologist., SSP Coordinator., Studbook Keeper., TAG Chair., and TAG Vice Chair. Year. Species common name (Scientific name) AZA Animal Program Population Viability Analysis Report. Lincoln Park Zoo: Chicago, IL.

Johnson, B., Ray, J., Reinartz, G., Meinelt, A., Stoinski, T., and Fenn, T. 2016. Bonobo (*Pan paniscus*) AZA Animal Program Population Viability Analysis Report. Lincoln Park Zoo: Chicago, IL.

**Citation of an SSP Sustainability Report:**

SSP Coordinator last name, first initial. Year published. Species common name (Scientific name) Species Survival Plan® Sustainability Report. Association of Zoos and Aquariums: Silver Spring, MD.

McAuliffe, J. 2017. Chimpanzee (*Pan troglodytes*) AZA Species Survival Plan® Sustainability Report. Association of Zoos and Aquariums: Silver Spring, MD.

**Citation of a Survival Statistic Report:**

(all Last name, First initial) SSP Coordinator., SSP Vice Coordinator., Studbook Keeper., Population Biologist. Year. Descriptive Survival Statistics Report for Species common name (Scientific name). Chicago (IL): Lincoln Park Zoo.

Fischer, M., Gray, C., Keele, M., Ray, J., Long, S. 2014. Descriptive Survival Statistics Report for Asian Elephant (*Elephas maximus*). Chicago (IL): Lincoln Park Zoo.

**Citation of PMCTrack:**

Faust, L., Theis, M., Long, S., and Shell, S. 2011b. PMCTrack: A Website for Monitoring Breeding and Transfer Recommendations for Zoo Programs. Lincoln Park Zoo, Chicago, IL.<<https://www.pmctrack.org>> .

**Citation of an Animal Care Manual:**

AZA (X) Species Survival Plan® (or Taxon Advisory Group). (YEAR). XXX Care Manual. Silver Spring, MD: Association of Zoos and Aquariums.

**Citation of an Ambassador Animal Guideline:**

AZA Ambassador Animal Scientific Advisory Group, Species Common Name Species Survival Plan® (or Taxon Advisory Group). (YEAR). Species common name Ambassador Animal Guidelines. Silver Spring, MD: Association of Zoos and Aquariums.