



Including In Situ Animals in PMx Export from ZIMS for Studbooks

Contact support@Species360.org

ZIMS for Studbooks PMx export allows the user to include in situ animals into the PMx export to more efficiently manage their full population. Only studbooks that manage animals in the wild should check the in situ box when exporting to PMx.

What happens if the "include in situ" box is UNCHECKED when exporting to PMx?

- When the in situ checkbox is unchecked (default) in the ZIMS for Studbooks PMx export, the exports treat release transactions as an exit from the population and recapture transactions as an enter into the population.
- Animals without a wild capture transaction will not be included since they have not entered the captive population.
- In addition, all animals with wild births are not included in the population's demographics or genetics until they have entered the captive population (any transactions prior to the wild capture is excluded).
- With the box unchecked, the PMx export works as it has historically been implemented. No changes were made to the export unless the box is checked. Please see our other PMx documentation for more details on the PMx export - PMx Export Documentation and Export to PMx.
- Most studbooks should leave the box unchecked when exporting to PMx.

What happens if the "include in situ" box is CHECKED when exporting to PMx?

- When the in situ checkbox in the PMx export is checked, the export does not treat release and recapture transactions as exit and enters, instead they are treated as transfer transactions.
- Animals with no wild capture event will be included in the exports. This means that any animal
 that is managed in the wild but has not come into captivity can be included in the PMx
 analysis.
- In addition, all animals with wild birth transactions will be included in the analysis on the birth date as opposed to the wild capture date. This allows users to include the full demographic history of all wild animals in PMx.

Below is a detailed description of what happens in the PMx export when the "include in situ" box is checked:

 A release transaction is not treated as an exit method in the PMx CSV files. The release is now treated as a transfer event (can be included or excluded depending on the location filter applied to the report).





- This means if the animal's current status is released, the exit date in the CSV file will not be the day of the release (as it is with the box unchecked) but the day the export was run since this animal is considered in the managed population. The exit method for this living animal would be "alive at the end of window"
- If the animal had a release transaction followed by a death or lost to follow-up transaction, then the exit date is the date of the LTF or death and the exit method will be LTF or died.
- A recapture transaction is not treated as an enter method in the PMx CSV files. The recapture
 is now treated as a transfer event (can be included or excluded depending on the location
 filter applied to the report).
- If an animal has multiple release/recapture events there will only be one line in the CSV file for this animal since release/recapture are not enters/exits from the population. As opposed to the box unchecked when the animal would be going in and out of the population with every release/recapture event and there would be multiple lines in the CSV file.
 - LTF and return from LTF events are not impacted when the box is checked, if an animal
 has LTF/return from LTF transactions within their transaction stream those will still be
 treated as enter/exits and means the animal will have multiple rows in the CSV.
- Animals with no wild capture event (animals that are in situ and have not come into the captive population) are included in the CSV files.
 - Entry date and entry method for these animals is as follows:
 - If the animal was born after the date filter applied to the export, then the entry date is the day the animal was born/hatched and entry method is "Alive at start of window"
 - If the animal was born/hatched prior to the filter applied but alive within the filter dates then the entry date is the date the filter was run and entry method is "imported into the window".
 - Exit dates and exit method for these animals is as follows:
 - If the animal has a death event, then the exit date is the death date and exit method is "died"
 - If the animal has a LTF event, then the exit date is the LTF date and the exit method is "LTF"
 - If the animal is alive as of the filter dates, then the exit date is the date of export and the exit method is "alive at the end of the window.
- Animals with wild capture events will have an entry on their birth date instead of their wild capture date (if those animals/transactions meet the filter criteria). This means all wild events will be included in the demographic analyses.
 - For example:





- With the box unchecked (with no date or location filters applied) the animal below would enter the population on 06/29/1965 since the export is not including the time the animal was in situ.
- With the box checked (with no date or location filters applied to the export) the animal below would enter the population on 01/01/1965 since the export is including the time the animal was in situ.

Event Type	Date	Location
Birth/Hatch (Wild Birth/Hatch)	01/01/1965	TSAVO NP
Wild Capture	06/29/1965	TSAVO NP
Transfer	05/22/1966	L RUHE

Frequently Asked Questions:

How do I know if I should check the in situ box?

It is recommended to only check the" include in situ box" if you manage animals in the wild as part of your managed program. The majority of programs managed in studbooks only manage animals in captivity, so you would not check the box. If you have questions or concerns, please contact your regional association or reach out to the SCTI team at help@vortex.org.

What if I want to include the wild animals in my managed genetic population but only include the captive population in the demographic analysis?

In this case, we would recommend that you run two PMx exports. One with the in situ box unchecked, this will give you the demographic data and only includes animals in captivity (and whatever additional filters you apply). Then another PMx export with the box checked, this will give you the genetically managed population and include the in situ animals as part of the managed population. When creating your export, you would use the demographic file from the unchecked export and the genetic and ZIMS file from the checked export.

If you have questions on the best way to create a PMx project for your species, please contact your regional association or the SCTI team at help@vortex.org.

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