

20240831_Dataset_Crane_Lita_READ_ME.odt

This document contains the information collected on 20240831Sa from the Movebank website about the Lithuanian common crane (*Grus grus*) with GPS Tracker ID 16121.

Because the crane is from Lithuania we named this crane 'Lita' in the documentation of The GeoStack Project which sounds a lot nicer than just 'crane 16121'.

This crane was ringed with color rings and also equipped with a GPS tracker in 2016 with the first recorded GPS logging on 20160730Sa and the last one on 20220330We.

It is unknown why there are no new GPS loggings after the last logging date for this crane but the 3 most likely reasons are: 1) the bird is not alive anymore because of a predator, an accident, the bird flue or another cause, 2) the GPS tracker is not working anymore because of a technical defect or 3) the dataset owner stopped the data publishing.

This document was compiled to help understand the dataset snapshot that was made to ensure the dataset is available at all times from our GeoStack Dataset repository, just in case the dataset would not be downloadable anymore from the Movebank website.

LICENCE TERMS FOR DATASET USE: Publication permission of this dataset snapshot on the GeoStack website was granted on 20220317Th by the dataset contact person Ramūnas Žydelis under the restriction the dataset is used FOR EDUCATION PURPOSES ONLY!

This means you can freely download and use the dataset for the GeoStack's Workshop and the GeoStack's Course as intended in the documentation of The GeoStack Project.

The dataset snapshot consists of two dataset files:

1. 20240831_Dataset_Crane_Lita_Reference_Data.csv
 1. This file contains the reference information on the animal and the GPS tracker.
 2. The animal species is the common crane (*Grus grus*) and the tracker is the OrniTrack-L40 from manufacturer Ornitela with GPS tracker ID 16121.
2. 20240831_Dataset_Crane_Lita_GPS_Locations.csv
 1. This file contains the GPS trackers's logging messages with the GPS locations.
 2. This is a large file of 105,6 MB and it holds a total of 429306 GPS locations collected over a period of almost 6 years.

Viewing the dataset snapshot files:

1. 20240831_Dataset_Snapshot_Crane_Lita_Reference_Data.csv
 1. This is a small file that can easily be viewed in the spreadsheet program LibreOffice Calc.
It consists of 2 rows with the field names as the worksheet's column names in the first row and the information in the second row.
 2. Note: when opening the file check if the field 'Character set' is set to 'Unicode (UTF-8)' and not 'Unicode (UTF-16)' to get the text displayed correctly!
 3. Of course the CSV file can be opened in a programming editor but that will not give the nice tabular presentation in columns as the long lines are wrapped.

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2. 20240831_Dataset_Snapshot_Crane_Lita_GPS_Locations.csv
 1. This file can also be opened in LibreOffice Calc and again check the character set is set correctly to 'Unicode (UTF-8)' and be aware it may take 15 – 30 seconds to read the entire file into the spreadsheet and render it for display on the screen, depending on how fast your computer is.
 2. The spreadsheet table will show 429307 rows of which the first row holds the field names and the other 429306 rows hold the GPS tracker's logging messages with a date-time stamp, the GPS location and other technical values from different sensors in the tracker that might be quite interesting too to study!

Weblink for crane Lita on Movebank.org

1. The information and datasets for crane Lita can be found on this Study webpage:
 1. [Study - Common Crane Lithuania GPS, 2016](#) (= weblink above)
2. Snapshot of Information Web Pages
 1. The contents from the 4 information web pages 'Study Details', 'Animal Details', 'Deployment Details' and 'Tag Details' were copied into this document on the pages below as a 'Freeze Frame' on the snapshot date of 20240831Sa.
3. Dataset Download (If still available on the Movebank website.)
 1. On the Study webpage click 'File Formats' in the left window pane under the title weblink 'Study - Common Crane Lithuania GPS, 2016'.
 2. Click the pull-down menu 'Downloads' and select either the dataset or the reference data to download.
 3. Now select the desired file format in the pop-up window, like the CSV file format.
 4. Finally click the 'Download' button to save the selected data file.

Weblinks for Background Information on Terminology and Datasets

1. Study details
 1. https://www.movebank.org/cms/movebank-content/studies-page#study_details
2. Dataset attributes
 1. <https://www.movebank.org/cms/movebank-content/movebank-attribute-dictionary>
3. Movebank Data Model
 1. https://www.movebank.org/cms/movebank-content/mb-data-model#reference_data

Snapshot of Information Webpages for crane Lita

Below are the 'Freeze Frame' copies of the contents from the 4 information web pages 'Study Details', 'Animal Details', 'Deployment Details' and 'Tag Details', just in case a future download from Movebank is not possible anymore.

Study Details

Weblink:

https://www.movebank.org/cms/webapp?gwt_fragment=page%3Dstudies%2Cpath%3Dstudy195375760

Study Details

Study Name	Common Crane Lithuania GPS, 2016
Contact Person	<u>Ramūnas Žydelis</u>
Principal Investigator	<u>Mindaugas Dagys & Ramūnas Žydelis</u>
Citation	unpublished and ongoing study by Ornitela
Acknowledgements	Valentinas Pabrinkis, Lithuanian University of Educational Sciences
Grants used	
License Type	Custom
License Terms	<i>not set</i>
Study Summary	Crane investigations in Lithuania using GPS telemetry have been initiated by Mindaugas Dagys and Ramūnas Žydelis. In this study we use OrniTrack solar powered GPS-GSM/GPRS transmitter that is mounted on birds leg. The data is uploaded to Movebank using Ornitela live feed.
Study Reference	
Location	
Longitude	24.620
Latitude	54.610
Movebank ID	195375760

Study Statistics

Number of Animals	1
Number of Tags	1
Number of Deployments	1
Time of First Deployed Location	2016-07-30 06:43:06.000
Time of Last Deployed Location	2022-03-30 11:05:19.000
Taxa	Grus grus
Number of Deployed Locations	429306
Number of Records	Deployed (outliers) / Total (outliers)
GPS	429306 (0) / 430919 (0)

Animal Details

Weblink:

<https://www.movebank.org/movebank/#page=studies.path=study195375760+individual195375963>

Animal Details

Animal Id 16121
Taxon Grus grus
Taxon Detail *not set*
Sex *not set*
Nick Name *not set*
Comments *not set*

Birth/Hatch Latitude *not set*
Birth/Hatch Longitude *not set*
Death Comments *not set*
Exact Date of Birth *not set*
Group ID *not set*
Latest Date Born *not set*
Marker ID *not set*
Mates *not set*
Mortality Latitude *not set*
Mortality Longitude *not set*
Mortality Type *not set*
Mortality Date *not set*
Offspring *not set*
Parents *not set*
Ring ID *not set*
Siblings *not set*

Animal Statistics

Time of First Location 2016-07-30 06:43:06.000
Time of Last Location 2022-03-30 11:05:19.000
Number of Locations 429306
Number of Records Valid (outlier)
GPS 429306 (0)

Deployment Details

Weblink:

<https://www.movebank.org/movebank/#page=studies.path=study195375760+tag195376065+deployment195376924>

Deployment Details

Animal	<u>16121</u>
Tag	<u>16121</u>
Start of tag deployment	2016-07-30 06:40:00.000
End of tag deployment	<i>not set</i>
Deploy on person	<i>not set</i>
Deploy off person	<i>not set</i>
Deployment Id	16121
Comments	<i>not set</i>
Alternative Project ID	<i>not set</i>
Animal Life Stage	adult
Animal Mass	<i>not set</i>
Animal Reproductive Condition	breeding
Attachment Body Part	<i>not set</i>
Attachment Comments	<i>not set</i>
Attachment Type	other
Behavior According To	<i>not set</i>
Capture Handling Time	<i>not set</i>
Capture Latitude	<i>not set</i>
Capture Longitude	<i>not set</i>
Capture Method	<i>not set</i>
Capture Timestamp	<i>not set</i>
DBA Comments	<i>not set</i>
Data Processing Software	<i>not set</i>
Deploy On Latitude	<i>not set</i>
Deploy On Longitude	<i>not set</i>
Deploy-On Measurements	<i>not set</i>
Deploy-On Sampling	<i>not set</i>
Deploy Off Latitude	<i>not set</i>
Deploy Off Longitude	<i>not set</i>
Deploy-Off Measurements	<i>not set</i>
Deploy-Off Sampling	<i>not set</i>
Deployment End Comments	<i>not set</i>
Deployment End Type	<i>not set</i>
Deployment Image	<i>not set</i>

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Duty Cycle	<i>not set</i>
Geolocator Calibration	<i>not set</i>
Geolocator Light Threshold	<i>not set</i>
Geolocator Sensor Comments	<i>not set</i>
Geolocator Sun Elevation Angle	<i>not set</i>
Georeference Protocol	<i>not set</i>
Habitat According To	<i>not set</i>
Locality According To	<i>not set</i>
Location Accuracy Comments	<i>not set</i>
Manipulation Comments	<i>not set</i>
Manipulation Type	<i>not set</i>
Outlier Comments	<i>not set</i>
Scheduled Detachment Date	<i>not set</i>
Study Site	<i>not set</i>
Tag Calibration	<i>not set</i>
Tag Firmware	<i>not set</i>
Tag Mass Total	<i>not set</i>
Tag Readout Method	phone-network
Tag Retrieval Date	<i>not set</i>
Tag Settings	<i>not set</i>

Deployment Statistics

Time of First Location	2016-07-30 06:43:06.000
Time of Last Location	2022-03-30 11:05:19.000
Number of Locations	429306
Number of Records	Valid (outlier)
GPS	429306 (0)

Tag Details

Weblink:

<https://www.movebank.org/movebank/#page%3Dstudies%2Cpath%3Dstudy195375760%2Btag195376065>

Tag Details

Tag Id	16121
Sensor Types	GPS
Manufacturer Name	Ornitela
Model	OrniTrack-L40
Serial Number	16121
Mass (in grams)	40.0
Comments	leg-mount transmitter
Tag Failure Comments	<i>not set</i>
Processing Type	<i>not set</i>
Beacon Frequency	<i>not set</i>
Tag Production Date	June 2016

Tag Statistics

Time of First Location	2016-07-30 06:43:06.000
Time of Last Location	2022-03-30 11:05:19.000
Number of Locations	429306
Number of Records	Deployed (outliers) / Total (outliers)
GPS	429306 (0) / 430919 (0)