
AniShare Documentation

Release 1.5

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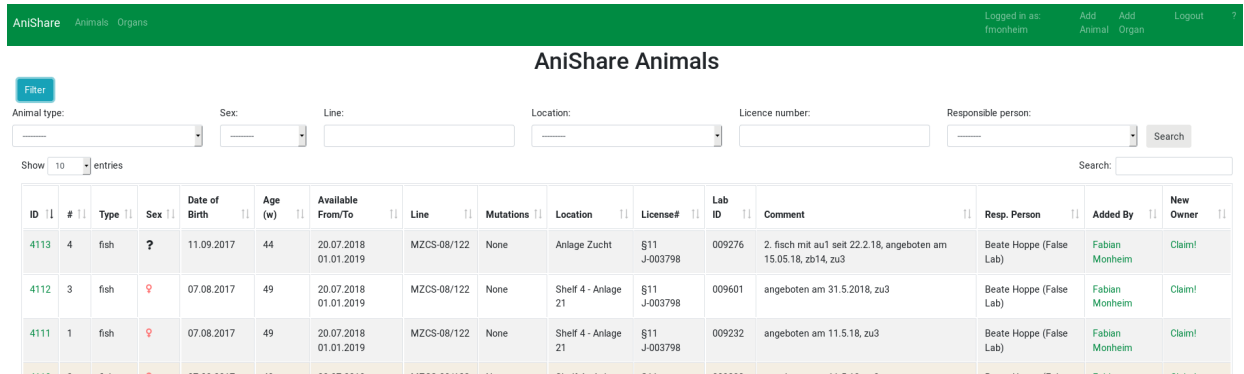
Chapter 1

Introduction

anishare is a webservice for research institutes to share animals with the goal to re-use animals and thus minimize total animal usage.

It has been developed at the [Leibniz institute for aging research](#) in Jena. This django app is meant to be used by researchers who want to share research animals with their colleagues. The basic idea is that animals are bred for experiments; however, sometimes, not all parts of the animal are used or sometimes an experiment gets cancelled for whatever reason. By sharing animals within the institute, less animals in total have to be sacrificed for research.

Anishare is a simple database of animals offered for reuse and a easy way to claim an animal with automatic generation of email messages as well as an RSS feed for updates.



ID	#	Type	Sex	Date of Birth	Age (w)	Available From/To	Line	Mutations	Location	License#	Lab ID	Comment	Resp. Person	Added By	New Owner
4113	4	fish	?	11.09.2017	44	20.07.2018 01.01.2019	MZCS-08/122	None	Anlage Zucht	§11 J-003798	009276	2. fisch mit au1 seit 22.2.18, angeboten am 15.05.18, zb14, zu3	Beate Hoppe (False Lab)	Fabian Monheim	Claim!
4112	3	fish	♀	07.08.2017	49	20.07.2018 01.01.2019	MZCS-08/122	None	Shelf 4 - Anlage 21	§11 J-003798	009601	angeboten am 31.5.2018, zu3	Beate Hoppe (False Lab)	Fabian Monheim	Claim!
4111	1	fish	♀	07.08.2017	49	20.07.2018 01.01.2019	MZCS-08/122	None	Shelf 4 - Anlage 21	§11 J-003798	009232	angeboten am 11.5.18, zu3	Beate Hoppe (False Lab)	Fabian Monheim	Claim!

At the moment, the software/database is geared towards handling of mice, however, it can be adjusted to handle any kind of research animal. AniShare is not connected to *PyRat* or *Tick@lab*. The official changes (e.g. new ownership must be applied in *PyRat* or *Tick@lab* separately by the responsible person, in communication with the animal care takers).

This documentation can also be downloaded as pdf file: [Anishare Documentation](#)

Chapter 2

Contact

Technical and application support: Fabian Monheim (CF Scientific IT), fabian.monheim@leibniz-fli.de, 03641-65-6872

Content support: Animal Facility and Animal Welfare Officer

Sitemap

- Start: <https://anishare.leibniz-fli.de>
- Animal: <https://anishare.leibniz-fli.de/animals>
- Organ: <https://anishare.leibniz-fli.de/organs>
- Animal and organ feed: <https://anishare.leibniz-fli.de/animals/feed>
- Administration: <https://anishare.leibniz-fli.de/admin>
- Macros: <https://anishare.leibniz-fli.de/macros>
- Change history: <https://anishare.leibniz-fli.de/changehistory>
- Change history feed: <https://anishare.leibniz-fli.de/changehistory/feed>

User types

- User: every FLI employee who wants to claim an animal.
- Manager: this person is appointed within the research group and coordinates the offering/sharing of animals.
- Person who perform euthanasia: this person will be named in anishare by the manager (relevant only for organ sharing).
- Superuser: this person is administrator of the database and has the full control of the function (IT, animal welfare officers, veterinarians and heads of animal facilities).

Chapter 5

Main user interface

5.1 Animals

The main user-facing site is the list of animals to be shared. A user can browse this list, sort it via the headers or search for a term using the search bar.

The screenshot shows the AniShare Animals interface. At the top is a green navigation bar with 'AniShare Animals Organs' on the left and 'Logged in as: fmonheim', 'Add Animal', 'Add Organ', and 'Logout' on the right. Below the navigation bar is the title 'AniShare Animals'. A 'Filter' button is on the left. Below it are input fields for 'Animal type:', 'Sex:', 'Line:', 'Location:', 'Licence number:', and 'Responsible person:', followed by a 'Search' button. Below these fields is a 'Show 10 entries' link and a 'Search:' input field. The main part of the interface is a table with the following columns: ID, #, Type, Sex, Date of Birth, Age (w), Available From/To, Line, Mutations, Location, License#, Lab ID, Comment, Resp. Person, Added By, and New Owner. The table contains three visible rows of animal data.

ID	#	Type	Sex	Date of Birth	Age (w)	Available From/To	Line	Mutations	Location	License#	Lab ID	Comment	Resp. Person	Added By	New Owner
4113	4	fish	?	11.09.2017	44	20.07.2018 01.01.2019	MZCS-08/122	None	Anlage Zucht	§11 J-003798	009276	2. fisch mit au1 seit 22.2.18, angeboten am 15.05.18, zb14, zu3	Beate Hoppe (False Lab)	Fabian Monheim	Claim!
4112	3	fish	♀	07.08.2017	49	20.07.2018 01.01.2019	MZCS-08/122	None	Shelf 4 - Anlage 21	§11 J-003798	009601	angeboten am 31.5.2018, zu3	Beate Hoppe (False Lab)	Fabian Monheim	Claim!
4111	1	fish	♀	07.08.2017	49	20.07.2018 01.01.2019	MZCS-08/122	None	Shelf 4 - Anlage 21	§11 J-003798	009232	angeboten am 11.5.18, zu3	Beate Hoppe (False Lab)	Fabian Monheim	Claim!

If a user is interested in an animal, they should click on the button “Claim” which will bring up another page (see below) in which they can review their claim before finally submitting. When they click on “Yes, I want to claim this!”, then they will be entered as *new owner* of this animal and an email will be send to them as well as the responsible/contact person informing them about this transaction. To claim more than one animal it is possible to select the desired animals at the first coloumn. Please use after selection the button **Claim all selected animals**. Again a new page opens to review the selection. After submitting the responsible person(s) of the animals only get one email with their claimed animals. To claim an animal from a fish group (coloumn # > 1) it is nessecary to claim it individually with the claim function of the entry (last coloumn).

Note: If more than one animal is available (coloumn # > 1), the user can adjust the number they want to claim. The remaining animals will still be available for claim. Because of uniqueness it's only possible to offer exactly one mouse per dataset. In contrast fishes can be offer in a group.

AniShare Animals

Filter

Show 10 entries

Search:

	ID	#	Type	Sex	Date of Birth	Age (w)	Available From/To	Line	Mutations	Location	License#	Lab ID	Comment	Resp. Person	New Owner
<input type="checkbox"/>	4099	1	fish	♂	07.08.2017	51	20.07.2018 01.01.2019	MZCS-08/122	None	Shelf 5 - Anlage 22	§11 J-003798	008373	angeboten am 04.06.2018, sw2	Beate Hoppe (False Lab)	Claim!
<input type="checkbox"/>	4100	1	fish	♂	03.07.2017	56	20.07.2018 01.01.2019	MZCS-08/122	None	Shelf 5 - Anlage 22	§11 J-003798	005097	angeboten am 23.05.18	Johannes Krug (False Lab)	Claim!

5.2 Organs

There exists an individual page for animal organ share. It is very similar to the animal page, however only individual organs are for offer. The entry at the column `Organ (used)` indicates all organs which can not be claimed. Also there is no availability period, but a day at which the animal gets sacrificed. The person responsible for sacrifice the animal will be informed via email if anybody claims some of the available organs. The entry will remain available to others (as they might want to claim other organs).

Organ index view:

AniShare Organs

Filter

Show 10 entries

Search: 115

ID	Type	Organ used	Sex	Date of Birth	Date of Death	Sacrifice Method	Euthanasia performed by	Age (w)	Line	Mutations	Location	License#	Lab ID	Comment	Resp. Person
6	mouse		♂	09.05.2016	27.07.2018	other	fabian.monheim@leibniz-fli.de	115	HRASG12Vgeo-kjp21-ko	HRASG12Vgeo-ki p21-ko	Mauscontainer	123	108	None	Christina Valkova (Kaether Lab)
5	mouse		♂	09.05.2016	27.07.2018	CO2	fabian.monheim@leibniz-fli.de	115	HRASG12Vgeo-kjp21-ko	HRASG12Vgeo-ki p21-ko	Mauscontainer	123	107	None	Christina Valkova (Kaether Lab)

Organ claim view:

Dear **Fabian Monheim**, do you really want to claim an **organ** of the following animal for yourself?

ID	Type	Organ (used)	Sex	Date of Birth	Date of Death	Sacrifice Method	Euthanasia performed by	Age (w)	Line	Mutations	Location	License#	ext. Info	Comment	Added By
6	mouse		♂	09.05.2016	27.07.2018	other	fabian.monheim@leibniz-fli.de	115	HRASG12Vgeo-kjp21-ko	HRASG12Vgeo-ki p21-ko	Mauscontainer	123	CIR-000504108		Fabian Monheim

By clicking on the button, an email will be sent from
 fabian.monheim@leibniz-fli.de to
 fabian.monheim@leibniz-fli.de
 informing that you are interested in the following organs/parts
 from the entry above.
 They will get in touch with you.

5.3 RSS Feed

An RSS feed containing the latest ten animals and organs is automatically generated and can be found at */animals/feed*. Users can subscribe (Most email clients allow the subscription to RSS feeds) to this feed to stay up-to-date with the animal catalogue. By clicking on a link in the feed, they are directed to the claim page of the individual animal/organ.

Anishare animal feed

Updates on animals to share.

[10 unknown fish, some line id:3 \[2018-05-06\]](#)

id:248962, lab_id:LAB648, available:2018-06-01-2018-06-30, location:Fish Facility, mutations:

[2 female mouse, ko/ko id:4 \[2018-03-01\]](#)

id:695968, lab_id:LAB3584, available:2018-05-01-2018-05-16, location:Animal House 2, mutations:

[2 male mouse, ko/ko id:1 \[2018-01-01\]](#)

id:274628, lab_id:LAB648, available:2018-05-29-2018-06-30, location:Animal House 1, mutations:

[1 female mouse, ki/ki id:2 \[2018-03-01\]](#)

id:159758, lab_id:LAB3584, available:2018-05-29-2018-06-29, location:Animal House 2, mutations:

Chapter 6

Main animal manager tasks

An *animal manager* can add animals and organs to the database on two ways. First, it is possible to add entries manually. Secondly, it is possible to import an Excel sheet. At the FLI Jena there are two databases to manage animals. Now the databases are not connected. To transfer more than one or two datasets to anishare it's recommend to use the export function of *PyRAT* or *tick@lab* and the import function of anishare. To use the export/import process please read the topic **Animals import** or **Organs import**.

Welcome to AniShare

ANIMALS		
Animals	+ Add	 Change
Organs	+ Add	 Change
Persons		 Change

6.1 Add Animals manually

Click on Animals -> Add to add an animal.

Add animal

Amount:	<input type="text" value="1"/>	
	How many animals? (eg. fish in tank)	
Animal type:	<input type="text" value="mouse"/>	
Organ type:	<input type="text" value="spleen"/>	
Day of birth:	<input type="text" value="01.03.18"/>	Today
Available from:	<input type="text" value="30.05.18"/>	Today
Available to:	<input type="text" value="30.06.18"/>	Today
Sex:	<input type="radio"/> male <input checked="" type="radio"/> female <input type="radio"/> unknown <small>Select "unknown" if multiple animals.</small>	
External id:	<input type="text" value="946283"/>	
External lab id:	<input type="text" value="LAB3418"/>	
Line:	<input type="text" value="ko-/ko-"/>	
Location:	<input type="text" value="Animal House 1"/>	
	Where is the animal housed?	
Responsible person:	<input type="text" value="Roger Roger (Lab B Lab)"/>	
	Person who is responsible in the lab for dealing with the animals	
Licence number:	<input type="text" value="#182938"/>	

All fields in bold **need** to be filled in, the others are optional.

After adding several animals, the main (index) view should look like this:

6.2.1 From PyRAT

PyRAT Animals Stud males

Quick Select - Choose action | 5 animals selected

Apply

Add procedure: Behavioural test: Elevated Beam
(More procedures might be available for individual animals)

Comments:

WR ID	Lab ID	P
<input type="checkbox"/> CIR-000592	149	
<input type="checkbox"/> CIR-000593	150	
<input type="checkbox"/> CIR-000594	153	
<input type="checkbox"/> CIR-000596	147	
<input checked="" type="checkbox"/> CIR-000604	156	
<input checked="" type="checkbox"/> CIR-000605	157	
<input checked="" type="checkbox"/> CIR-000606	158	
<input checked="" type="checkbox"/> CIR-000608	160	
<input checked="" type="checkbox"/> CIR-000609	162	
<input type="checkbox"/> CIR-000610	174	
<input type="checkbox"/> CIR-000612	178	
<input type="checkbox"/> CIR-000614	168	
<input type="checkbox"/> CIR-000615	171	

Set as studs

Set setup date: 12/07/2018

Isolate embryos: 0

Cell stage: Unknown

Origin: internal

Owner: Default

Line / Strain: Set Line / Strain

Discarded embryos: 0 (Incubated embryos: 0)

Isolate sperm: 0 µl

Origin: internal

Owner: Default

Line / Strain: Set Line / Strain

Assign these animals to the foster mother pool

Remove these animals from the foster mother pool

Assign these animals to the oocyte donor pool

Remove these animals from the oocyte donor pool

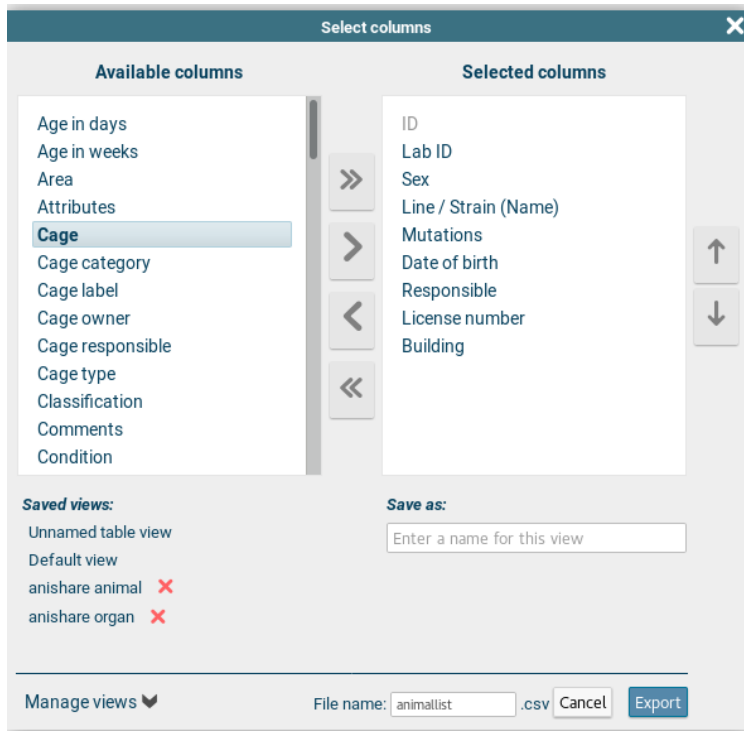
Set pregnancy: Pregnant

Print stickers: Genotyping Stickers (Herma 4211, 7x16)

Export this list to Excel

Now it's important to select all mandatory fields: **ID, Lab ID, Sex, Line / Strain (Name), Mutations, Date of birth, Responsible, License number, Building**

It's possible to save the selected columns as a Manage View for reuse (fold out Manage View on the left side of the File name)



After downloading the file it's necessary to edit the file because the columns **Animal type, Available from, Available to** are missing. To simplify this process there are macros for LibreOffice and MS Office. The macros automatically add the missing columns and add the values mouse (Animal type), Current Date (Available from), Current Date + 14 days (Available to). Please refer to the [macro site](#) to downloading the macros and further information.

After adding the missing columns the file can be saved. Please use the .xlsx file format. Now go to the anishare admin interface to Home > Animals > Animals and click the button **IMPORT** (above the filter). Select the file and choose the file format. Upload the file. After submitting all datasets will show to the user if all requirements match.

6.2.2 From *tick@lab*

First login to *Tick@lab* and open the population site. All visible entries can be exported with the button *Export to Excel*. It isn't yet possible to export only selected animals. Therefore use the filter option.



To import the file it's necessary to do a lot of changes to the structure of the data. So please use the macro which does the changes automatically. Please refer to the [macro site](#) to downloading the macro and further information.

After running the macro the file can be saved. Please use the .xlsx file format. Now go to the anishare admin interface to Home > Animals > Animals and click the button **IMPORT** (above the filter). Select the file and choose the file format. Upload the file. After submitting all datasets will show to the user if all requirements match.

6.3 Add Organs manually

Click on Organs -> Add to add an organ.

Add organ

Amount:

How many organs?

Animal type:

Sex:

☐ male ☐ female ☐ unknown

Select "unknown" if multiple animals.

Organ type:

Day of birth:

 Today |

Day of death:

 Today |

Method of killing:

Killing person:

Email address of the person who is responsible for killing the animal

Database id:

ID of animal in eg. PYRAT

Lab id:

ID of lab in eg. PYRAT

Line:

genetic trait of animal

Location:

Where is the animal housed?

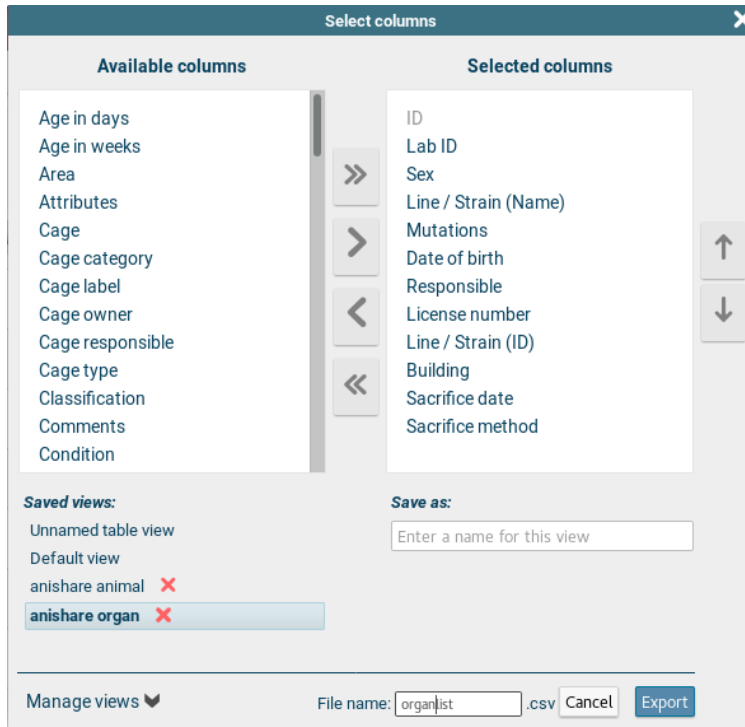
All fields in bold **need** to be filled in, the others are optional.

6.4 Organs import

6.4.1 From PyRAT

First login to PyRAT and switch to the english version of PyRAT if it is no preset. Then select the animals which should be import to anishare. Click on `QS` (Quick Select) and activate the option `Export this list to Excel`. Push the button `Apply`.

Now it's important to select all mandatory fields: **ID, Lab ID, Sex, Line / Strine (Name), Mutations, Date of birth, Responsible, License number, Building, Sacrifice date, Sacrifice method**



It's possible to save the selected columns as a `Manage View` for reuse (fold out `Manage View` on the left side of the `File name`)

After downloading the file it's necessary to edit the file because the columns **Animal type, Euthanasia performed by, Comment** are missing. Furthermore the format of the column **Sacrifice date** needs to be adapted. To simplify this process there are macros for LibreOffice and MS Office. The macros automatically add the missing columns and add the value `mouse` at column **Animal type**. Please refer to the [macro site](#) to downloading the macros and further informations.

After running the macro it's possible to fill out the column **Sacrifice method** with one of the following entries: **CO2, cervicale dislocation, decapitation, blood withdrawal, finale heart punction, overdose anaesthetics, other** and the column **Organ used** with the following entries: **bladder, bone marrow, brain, genitals, heart, intestine, kidney, liver, lungs, other, spleen, stomach**. It's also possible to add these entries after uploading the file.

Note: It's possible to add more than one entry at the field **Organ used**. Please use a comma as separator like `brain, bladder`.

Please save the Excel file as `.xlsx` file. Now go to the anishare admin interface to `Home > Animals > Animals` and click the button `IMPORT` (above the filter). Select the file and choose the file format. Upload the file. After

submitting all datasets will show to the user if all requirements match.

6.4.2 From *tick@lab*

Because we expect only a small quantity of importing organs from *tick@lab* it's only possible to add entries manually.

6.5 Duplicating entries

For input of multiple similar entries, it is possible to duplicate an animal or organ entry. For this, select one or more entries in the list (see figure below) and select “*copy animal*” from the dropdown menu and click “*Go*”.

Select animal to change

Search

Action: ☒ 1 of 100 selected

AMOUNT	BIRTH	AGE (W)	AVAILABLE FROM	AVAILABLE TO	LINE	SEX	LOCATION	LICENCE NUMBER
<input checked="" type="checkbox"/> 1	06.06.2018	01.01.2018	22	01.06.2018	01.07.2018	ko/ko	male	BIZ #007

Another option is to edit an existing animal and click on “*Save as new*”. This will save the currently edited animal as a new instance:

Change animal HISTORY VIEW ON SITE >

Delete Save as new Save and continue editing SAVE

Amount: How many animals? (eg. fish in tank)

Animal type:

Day of birth: Today

Available from: Today

Available to: Today

Sex: ☒ male ☐ female ☐ unknown Select "unknown" if multiple animals.

Database id: ID of animal in eg. PYRAT

Lab id: ID of lab in eg. PYRAT

Line: genetic trait of animal

Chapter 7

Main administrator tasks

The administrator can edit more objects in the admin interface, namely not just animals and organs but also labs, locations and persons:

Welcome to AniShare

ANIMALS		
Animals	+ Add	✎ Change
Labs	+ Add	✎ Change
Locations	+ Add	✎ Change
Organs	+ Add	✎ Change
Persons	+ Add	✎ Change

7.1 Organs used

These organs are standard values for the field **Organ used**.

7.2 Animals

The main category to administer are animals to share. Here, several filters (such as “sex”, “location”, etc.) are available to search for any set of animals.

Select animal to change

[ADD ANIMAL](#)

Action: 0 of 5 selected

<input type="checkbox"/>	AMOUNT	ENTRY DATE	DAY OF BIRTH	AGE (W)	AVAILABLE FROM	AVAILABLE TO	LINE	SEX	LOCATION	LICENCE NUMBER	RESPONSIBLE PERSON	ADC
<input type="checkbox"/>	1	31.05.2018	01.01.2018	21	01.06.2018	01.07.2018	ko/ko	male	Outside	#007	Roger Roger (Lab B Lab)	test
<input type="checkbox"/>	2	30.05.2018	01.03.2018	10	01.05.2018	16.05.2018	ko/ko	female	Animal House 2	#154253	Mike Smith (Lab A Lab)	test
<input type="checkbox"/>	10	30.05.2018	06.05.2018	3	01.06.2018	30.06.2018	some line	unknown	Fish Facility	#154634	Fishy McFishface (Fish Lab)	test
<input type="checkbox"/>	1	29.05.2018	01.03.2018	13	29.05.2018	29.06.2018	ki/ki	female	Animal House 2	#900238	Roger Roger (Lab B Lab)	test
<input type="checkbox"/>	2	29.05.2018	01.01.2018	21	29.05.2018	30.06.2018	ko/ko	male	Animal House 1	#900238	Mike Smith (Lab A Lab)	test

5 animals

FILTER
 By amount
 All
 1
 2
 10
 By sex
 All
 male
 female
 unknown
 By responsible for lab
 All
 Lab A Lab
 Lab B Lab
 Fish Lab
 By location
 All
 Animal House 1
 Outdoors
 Animal House 2
 Fish Facility
 Outside

Note: in order to remove a claim (thus making the animal available again), either click on an animal and remove the email address from the field “new owner”, or select one or multiple animals and select the “clear claim” *Action* and click “Go”.

Note: Once created, an animal cannot be deleted, except by the administrator.

7.3 Labs

Labs are research labs/research groups and need to have at least one responsible/contact person each

Select lab to change

Action: 0 of 3 selected

<input type="checkbox"/>	NAME	RESPONSIBLE PERSON
<input type="checkbox"/>	Fish	Fishy McFishface
<input type="checkbox"/>	Lab B	Roger Roger
<input type="checkbox"/>	Lab A	Mike Smith

3 labs

Note: Only *administrators* are allowed to see and change Labs

7.4 Locations

Locations are where animals are stored. Usually something like room numbers or “animal house” or “fish facility”.

Select location to change

Action: 0 of 5 selected

☐ NAME

☐ Outside

☐ Fish Facility

☐ Animal House 2

☐ Outdoors

☐ Animal House 1

5 locations

Note: Only *administrators* are allowed to see and change Locations

7.5 Persons

Persons responsible for the animals. Could be a vet or similar. Every animal needs to have a responsible person associated to them. This person then gets an email when the animal is being claimed.

Select person to change

Action: 0 of 3 selected

<input type="checkbox"/>	NAME	EMAIL	RESPONSIBLE FOR LAB
<input type="checkbox"/>	Fishy McFishface	fishymcfishface@nowhere.com	Fish Lab
<input type="checkbox"/>	Mike Smith	mike.smith@nowhere.com	Lab A Lab
<input type="checkbox"/>	Roger Roger	roger.roger@nowhere.com	Lab B Lab

3 persons

Note: Only *administrators* are allowed to see and change Persons
