

First Steps with AmphIdent

Maximilian Matthe

This document provides a simple introduction to the work with AmphIdent. Please refer to the manual of AmphIdent for further information.

Inhaltsverzeichnis

1	Installation	1
2	Settings at first start	2
2.1	Setting the database file	2
2.2	Setting the internal database	2
3	Processing of a sample image	2
3.1	Procedure with fire-bellied toads	3
3.2	Procedure with crested newts	4
3.3	Saving of the new pattern	6
4	How to go further?	7

1 Installation

Having bought the full version or downloaded the test version you receive a file AmphIdent.exe. Execute it, agree with the license agreements and follow the provided instructions. Afterwards AmphIdent is installed and ready for business.

Info: If you have bought the full version of AmphIdent and are thus using no test version you need to activate your license before you can begin with your work. Please refer to the manual.

2 Settings at first start

Start AmphIdent by **Start-All programs-AmphIdent-AmphIdent** with the species you need. At the first start AmphIdent invites you to make two settings.

2.1 Setting the database file

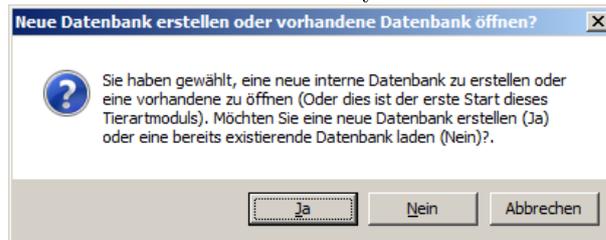
First you have to choose your database file. That database will contain the association between individuals and images. You have to choose it depending on your database module. After installation the default module is the text database module.

If you are using a text database select a new text file in some directory.

If you are using the database module for MS Access select an existing MS-Access-Database (which needs to fulfill some requirements (see the manual)).

2.2 Setting the internal database

Thereupon you have to choose whether you would like to create a new internal database or use an already existing one. The internal database saves the already processed patterns. At first use naturally there is no such database, so you have to choose **Yes**.



A dialog appears where you should select a directory where your processed patterns will be stored. (Fig. 1). The directory must not contain any files, so it is better to create a new one for that purpose.

Select an empty folder (or create a new one). The main window of AmphIdent appears in the Comparison View.

3 Processing of a sample image

After you have done the settings above, the main window of AmphIdent appears in the Comparison View ¹.

Select the command **New picture** from the toolbar and open an image that contains an individual. You may download some sample images from the AmphIdent-Website.

A large dialog appears where you are going to extract the pattern of the individual from the image. The dialog looks different depending on the chosen species (Figs. 2,

¹Further information about the different views is given in the manual.



Abbildung 1: At first start AmphIdent calls you to choose a directory for a new database. Inside will be stored all processed patterns and the data to manage them.

3). The left side of the dialog contains the selected image, the right side contains the commands for the respective species. All dialogs are handled with the mouse.

Read one of the following sections in order to produce your pattern. Creating a pattern of the fire-bellied toad is simpler:

3.1 Procedure with fire-bellied toads

1. Make sure the check box **Cut animal** is selected.
2. Using the mouse draw a frame around the toad. Cut close to the pattern, but do not cut it away. If you did something wrong you can reload the image (and begin from start) by clicking the button **Reload**.
3. Make sure the checkbox **Set rect** is checked (it is automatically checked after cutting the pattern).
4. Draw a frame around the pattern of the toad. It surrounds the pattern that you see afterwards in the middle of the dialog.
5. Clicking and pulling the green corners turns the rect around its center, pulling the black points scales the rect. Now change the rect so that it covers the pattern as exact as possible. As a reference for the top border you may use the two points in the neck, for the bottom border the two lines are useful. A more precise description for positioning the rect is given in the manual.

6. After you have finished surrounding the pattern agree with your work by clicking **OK**.



Abbildung 2: A fire-bellied toad was cut and the rect was modified to cover the pattern as good as possible.

3.2 Procedure with crested newts

1. Make sure the check box **Cut animal** is selected.
2. Draw a frame around the belly pattern of the newt. Try to cut close to the pattern, but do not cut parts of the pattern away. The head of the newt should remain on the image after cutting. If you did something wrong you can start over with **Reload**.
3. AmphIdent now tries to find the contour of the newt. That works better, if the contrast between newt and background is larger. That means your background should be as bright as possible. Afterwards you have to improve the estimation manually. If you are not satisfied at all you may try to reload the image and cut some different region.

4. You can now move the points of the conture clicking and drawing them. Move all points such that they lie on the edge between pattern and the normal skin. You do not need to modify points that lie around the head or tail.
5. Now choose **Cut head** and draw a line at the above end of the pattern. This line separates the head part from the rest of the pattern. A suitable cutting line is the begin of the white pointed area in the neck area. You must not cut through any of the read lines. If that is necessary you have not set the points correctly. Move these conture points in that case.
6. Do the same with the tail. For the cutting line choose the cloaka.
7. Now you can correct the conture points if needed. As a help use the pattern in the middle of the dialog. It should only contain the pattern of the newt and no background or uncolored ventral surface. If you are satisfied with your work confirm with **OK**.

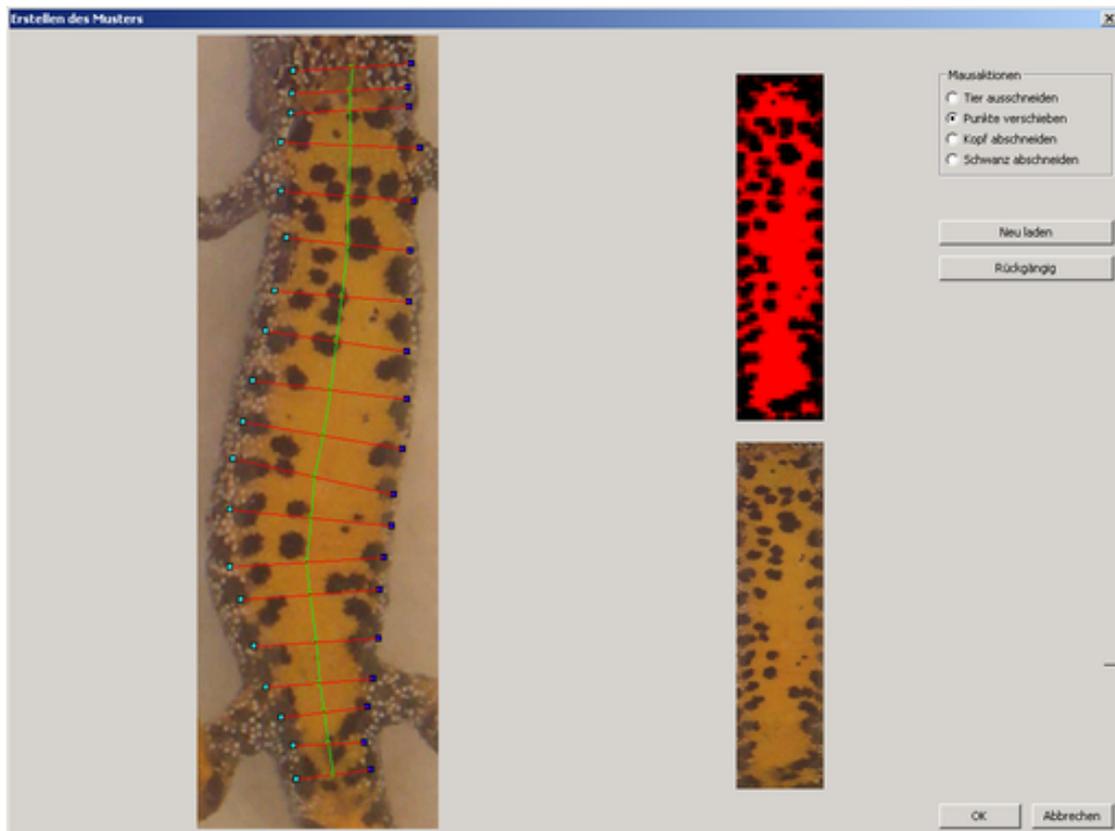


Abbildung 3: After the newt was cut out, its pattern was surrounded with points and overlaying points at the head and tail were cut.

3.3 Saving of the new pattern

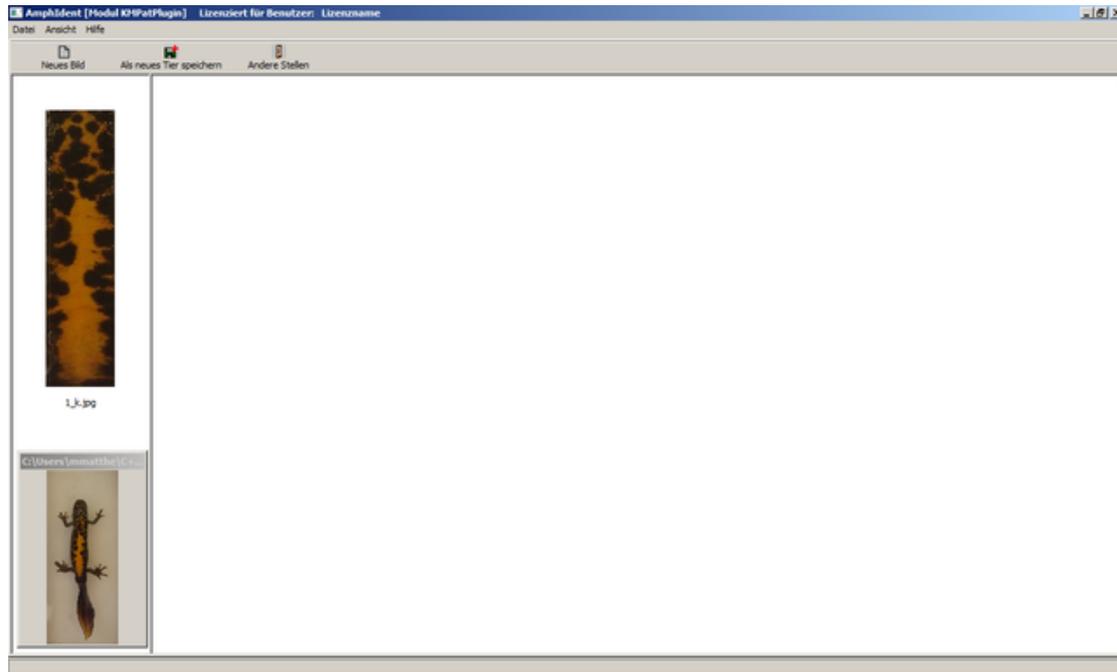


Abbildung 4: The main window of AmphIdent with empty internal database, after having created a new pattern.

After you have closed the dialog with **OK** another dialog appears that displays the created pattern. Please select **Compare complete pattern**. The main window of AmphIdent comes to front, its left side contains the created pattern (Abb. 4).

With an empty database The right part of the window stays empty because there are no other patterns in a newly created database. Select from the toolbar **Save as new animal** and confirm the appearing message with **OK**.

The just processed pattern is now added to the database. If you repeat the above process with other images your database will grow.

If there are already stored patterns in the database In case of using a non-empty database (e.g. by repeating the process above) the right side of the main window contains the patterns, which are most similar to the new pattern.

Now you have to compare the left pattern with those on the right side. If you find the the left pattern in the patterns on the right side (mostly in first three patterns), click on it with the right mouse button and select **Associate with this animal...**. This way you tell AmphIdent that the currently processed pattern belongs to the same individual as the clicked pattern on the right side.

If you cannot find the pattern in the list of patterns on the right side you most likely processed an individual which is not yet stored in the database. Therefore click on **Save as new animal**.

4 How to go further?

You now have made your first experiences with AmphIdent. I recommend you to process all sample images two times and save them in one database in order to get used to comparing, searching and associating the patterns.

You may also test your own images with that database to see, whether they are suitable for AmphIdent.

If you have become used to the work with AmphIdent you can create a new database (**File-Change internal database...**) and begin with real life work. Please do also change the external database or delete all rows from the table. You can check the file name of the external table in the *Options dialog* in the field *Database*.

You can get further information in the manual of AmphIdent or the manuals for the individual species modules.