

Tutorial 10: Tracing An Image And Animating A Butterfly

Learn how to

- Trace an image to create a realistic drawing
- Create an animated and static butterfly

Step 1: Set up the page

- Open Flash and resize the work area to 550 * 400 for this example. Choose any contrasting colour or insert a background image.
- Save the page as butterfly.fla


Step 2: Import the butterfly image

- Import the butterfly.jpg image into the library. Menu **File | Import | Import to Library...**
Photo by [Johan J.Ingles-Le Nobel](#) available under a [Creative Commons Attribution-Share Alike license](#)
- Create a layer called bg_butterfly
- Drag the butterfly image from the library onto the stage into the bg_butterfly layer
- Lock this layer so that you don't accidentally altered or draw on this layer



Step 4: Trace the wing

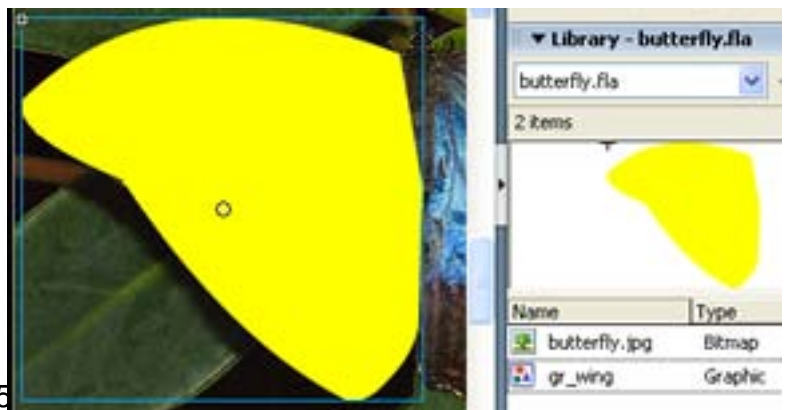
Using the line tool to recreate one of the wings by tracking around the outside of a wing

- Create a layer above the bg_butterfly layer called butterfly
- Select the line tool 
- Change the line (stroke) colour to contrast the butterfly
- Select the first frame on the butterfly layer
- Roughly trace all around one of the wings, by creating a number of joining straight lines on with the last line joining up with the first line
- Change to the select tool (v on the keyboard)
- Edit each straight line to make it curve to match the wing shape, by selecting and dragging straight line (when the arrow with a curve below appears)



Step 5: Create the wing graphic

- Fill the inside of the shape with a contrasting colour to the butterfly image, using the **Paint Bucket Tool**
- Remove outside line (as it can cause problems with later animations) by



selecting and deleting the lines

- Convert the image into a graphic (**F8**), call it gr_wing
- Note: if you are unable to fill the shape, it may be because the lines have not all joined up. Check the start and end puts are joined, there may be a small gap between them.

Step 6: Create the butterfly body

- Repeat steps 4 and 5 to trace and create a butterfly body
- Convert the image into a graphic (**F8**), call it gr_body

Step 7: Colour the wing and body graphics

- Use the drawing tools to colour the body and wing graphics
- Edit each graphic by double clicking on the graphic



Step 8: Delete the butterfly image

The original butterfly image can be deleted

- Delete the layer bg_butterfly
- Delete the wing and body images on the stage (there will be a copy of these images in the library)

Now you have the components to create an animated butterfly, the one wing will be used to create both wings. The animation of the butterfly wings can be created using either cell-based or motion tween animations.

The following is an explanation how to create the animated butterfly using a Motion Tween.

Butterfly Tween animation

Create the butterfly using Motion Tween animations

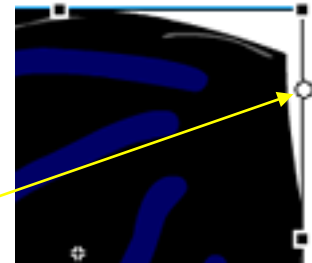
Step 1: Create a new movie clip

Create a new movie clip that will be the animated butterfly

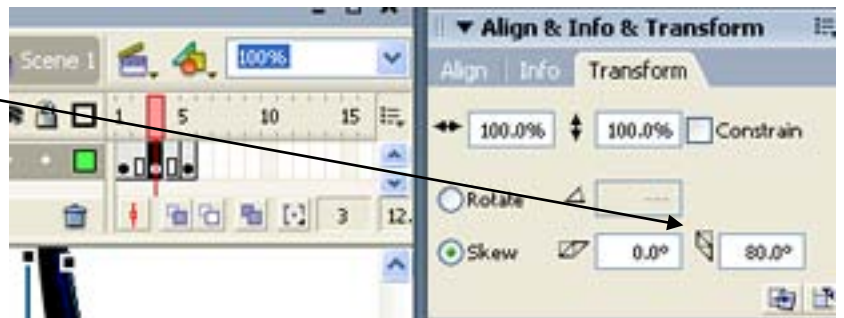
- **CTRL+F8** will create a new symbol
- Call it mc_flyingbutterfly and save it as a movie clip

Step 2: Create a flapping wing

- Create a layer call Lwing
- Insert the wing graphic in frame 1
- Move the **rotation point** to the edge of the wing by selecting the transform tool then clicking and dragging the rotation point.



- Select frame 5 and Insert Frames (F6)
- Add a Motion Tween
- In frame 3 – transform the wing to be Skewed Vertically by 80 degrees in the Transform window



- The wing will skew around the rotation point
- In frame 5 - – transform the wing to be Skewed Vertically by 0 degrees in the Transform window

Step 3: Test the flapping wing

- Delete all layers and images from the stage
- Drag the mc_flyingbutterfly movie clip onto the stage
- Use **Control | play** or **CTRL+Enter** to test your animation so far
- Check the flapping wing looks realistic, modify the animation if required

Step 4: Create the second flapping wing

The second wing will be made by copying, pasting and flipping the first wing

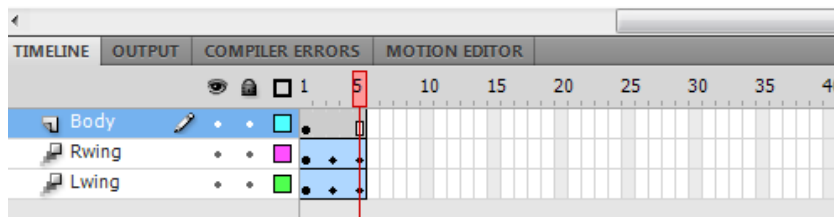
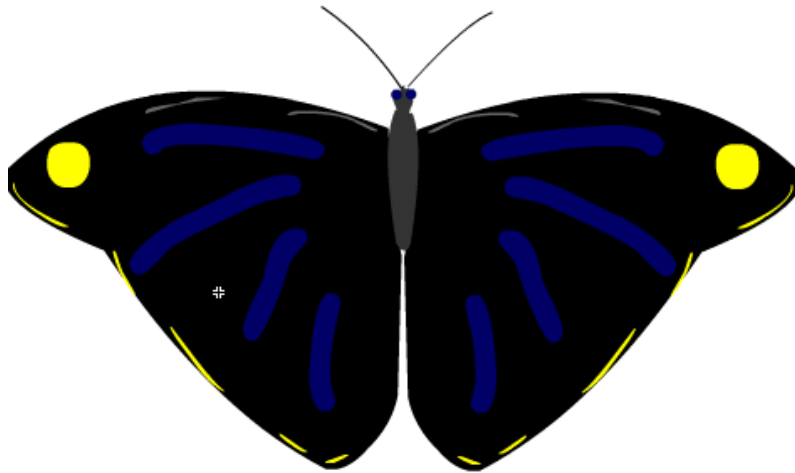
- In mc_flyingbutterfly create a new layer call Rwing
- Select and copy the existing flapping wing. Select the whole layer Lwing (including all frames) and copy the frames **Edit | Timeline | Copy Frames** or **CTRL+ALT+C** (Note: A normal copy will NOT copy all the frames, it will only copy one frame or object)
- Select the Rwing layer and paste the copied frames **Edit | Timeline | Paste Frames** or **CTRL+ALT+V**
- Flip the wing horizontally, by selecting in turn each keyframes (1 and 5) and flipping the wing horizontally: **Modify | Transform | Flip Horizontal**
- Select keyframe 3 and modify the skew to be (minus 80) -80 (so that it flaps up not down)

Step 5: Test the flapping wings

- Use **CTRL+Enter** to test your animation so far
- Check the two flapping wings looks realistic

Step 6: Add the body

- Create a new layer called **Body**
- Add the butterfly body graphic gr_body to the layer

**Step 7: Test the butterfly**

- Use **CTRL+Enter** to test your animation
- Check the butterfly looks like the sample animated butterfly
- Change the number of frames to make the flapping wings look realistic

Create a static butterfly Graphic

Using the mc_flyingButterfly, create a static butterfly graphic with its wings open

Step 1: Create a new Graphic

Create a new movie clip that will be the static butterfly with open wings

- **CTRL+F8** will create a new symbol
- Call it gr_butterfly and save it as a graphic

Step 2: Create the butterfly

- Open the mc_flyingbutterfly
- Select frame1 from each layer
- Copy the frames **CTRL+ALT+C**
- Open the gr_butterfly and paste the copied frames **CTRL+ALT+V**

Step 3: Test the butterfly

- Drag a copy of the gr_butterfly onto the stage
- Make it smaller using the Transform tool to fit on the same stage as the animated butterfly
- Use **CTRL+Enter** to test the butterfly. See if it is similar to the sample butterfly.

