FISH PHOTOGRAPHY

by

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I. PREPARING THE FISH

A. Pinning out the fins.

Choose the best looking side of the fish, that is, the side with the fewest scales missing, the fewest skin abrasions, and the pectoral and pelvic fins with the fewest membrane tears.

Lay out the fish with the best side up on a sheet of styrofoam. Expand each fin by pulling it toward the head. Insert a series of pins into each fin starting at the posterior end and proceeding forward. For those species of fish in which the spines project beyond the fin membrane, you will avoid making pinholes in the membrane if you insert the pins at the tops of the spines beyond the membrane.

The thicker the fish, the greater will be the gap between the fins and the sheet of styrofoam. Thin strips of styrofoam placed under the median (unpaired) fins and a block of styrofoam placed under the pelvic fin will fill the gaps. The fins can then be pinned in a more natural, unbent position (Figures 1a, 1b, 2a, and 2b).

Unnatural bend in fin

Distance between pelvic fin and styrofoam too great for pins.

Styrofoam strip

Styrofoam block

Figure 1a. Front view of thick fish that needs additional styrofoam under fins.

Figure 1b. Front view of thick fish showing placement of additional styrofoam.
Figure 2a. Top view of thick fish showing placement of additional styrofoam.

Figure 2b. Top view of thin fish (flounder). Fins can be pinned directly into styrofoam sheet.
B. Fixing the fins.

Using a small paintbrush, apply full strength formalin to the pinned out fins. Wait about five minutes for the formalin to penetrate the fins, then brush on a second application of formalin. For fish with thin delicate fins, the formalin will penetrate and fix the fins in a rigid position by about 5 minutes after the second application. For fish with thick fleshy fins, formalin penetration will take longer and require one or two more applications at intervals of about 5 minutes before the fins are rigidly fixed. Once the fins are fixed, remove the pins.

Next, carefully dry the fish with absorbent paper towels, being careful of the fixed fins, which, if pushed the wrong way, will lose their rigidity and collapse against the body. Drying the fish eliminates wet spots on the skin which will reflect the photo lamps. Also, drying reduces the probability of water seeping off the fish and onto the background during photography.

II. PHOTOGRAPHING: FISH LYING DIRECTLY ON A COLORED BACKGROUND (SIMPLE METHOD)

Place the fish on a colored background sheet. Use a non-porous, non-reflective (i.e., matt finish) material. A porous material would absorb slime or water from the surface of the fish resulting in a wet (darker) spot on the background. Also, a porous material would be more difficult to keep clean. A non-reflective material diffuses the light. I use a light blue plastic cloth. Blue is a pleasing to look at background color for almost any color of fish you photograph. The cloth can be rolled up for convenient storage when not in use.

Photograph in open shade, not in the direct sunlight. Direct sun causes harsh shadows behind the fish and also the sun will be reflected off those species of fish that have a shiny skin.

III. PHOTOGRAPHING: FISH LYING ON A GLASS SHELF WITH A COLORED BACKGROUND ON A SEPARATE SHELF.

A more elaborate method consists of laying the fish on a clear glass shelf and putting the colored background at a distance on a second shelf that is visible through the glass shelf. If you decrease the depth of field in the photograph by opening the lens aperture of the camera, you will throw the background out of focus. The background then becomes a diffuse, uniformly colored blur. This greatly reduces or sometimes totally eliminates the shadows cast on the background by the fish. The fish, being in focus, stands out in front of the blurred background.

The two-shelf photo table I use has a frame of angle iron. The glass top shelf nestles in the depression formed by the angle of the iron. I can easily lift off the glass to clean both surfaces. However, the glass won't fall out of the frame when it is used at sea on a rolling vessel.
A. Composing the picture

Look through the camera viewfinder and compose the picture by raising or lowering the camera until a margin of pleasing proportions surrounds the fish on all sides. Do not hold the camera directly over the composition or the reflection of the camera (and photographer) off the glass will appear in the photo. Instead, imagine a perpendicular line coming up from the glass at the edge of the composition, and keep the camera outside this perpendicular line (Figure 3).

Figure 3. Composing the photo. Camera position relative to the fish and background. Note that the colored background on the lower shelf is pulled out part way. This is often necessary in order to extend the background all the way to the upper edge of the composition.
B. Positioning the lights

At Sea. When I'm working on a rolling vessel I don't have a helper to hold the photo lamps steady on tripods. Therefore I put the photo lamps in a flexible gooseneck fixture. This gooseneck fixture is then attached to the camera by a thumbscrew threaded into the camera's tripod insert hole. The gooseneck fixture can be quickly detached from the camera before changing the film or for storage.

On Land. Photo lamps are put on tripods and placed at each end of the photo table.

C. Eliminating reflections off the glass from photo lamps.

The photo lamps must be positioned so their reflections off the glass don't enter the camera. Since the photo lamps are reflected off the glass at the same angle as they hit the glass (in technical terms, the angle of incidence equals the angle of reflection), the height and tilt of the photo lamps must be adjusted until none of the reflected light enters the lens of the camera (Figures 4a, 4b).

Figure 4a. At sea, photo lamps are on a flexible gooseneck fixture.
Figure 4b. On land, the photo lamps are on tripods.

Figure 4. Photo lamps positioned so that their reflections off the glass don't enter the camera.
D. Eliminating reflections off the glass from stray light sources.

Stray light from a variety of sources can reflect off the glass. Two examples are sunlight coming through a window and overhead room lights. Reflections from the sun can be eliminated by moving the photo table away from windows, or pulling the shades. Turn off all overhead room lights to eliminate their reflection (Figure 5a).

Avoid having any shiny objects on the opposite side of the photo table from the camera. Objects such as glass covered pictures or metal cabinets can reflect stray light onto the glass of the photo table which will then enter the camera (Figure 5b).

Figure 5a. Stray light sources such as the sun or overhead lights can reflect onto the glass of the photo table.

Figure 5b. Shiny objects can pass light along to the glass of the photo table.
PHOTOGRAPHY OF FISH AND OTHER AQUATIC SPECIES

BIBLIOGRAPHY


