



Angelfish Conformation

A presentation for The Angelfish Society
For the March 15, 2009 Monthly TAS
Meeting

Prepared by Tamar Stephens

Why Have Conformation Standards?

- “The purpose of developing a conformation standard for angelfish is to give a general guideline to hobbyists and breeders who may be wondering what is generally considered a natural or desirable trait.”

Purpose of this Presentation

- To familiarize you with the current conformation standards of TAS
- To give you pointers on selecting good quality angelfish for your show aquarium or for breeding
- To give you pointers on developing a good breeding program or improving the one you have already

Basis for TAS Conformation Standards

- Where do standards come from?
 - Standards start with the basic characteristics of a healthy wild angelfish.
 - Standards also address the color and finnage variations found in ornamental angelfish.
- TAS conformation standards are based on visible physical traits
 - Bodies
 - Fins
 - Color and pattern
 - Size

Body Characteristics



Body Shape

- Bodies should be round as possible or slightly higher than long. Long bodied angelfish are considered inferior looking by most people.
- Bodies should be thick when looking head-on with the fish. There should be no indication of a knife-like edge to the crown area.



Head profile

Predorsal
notch



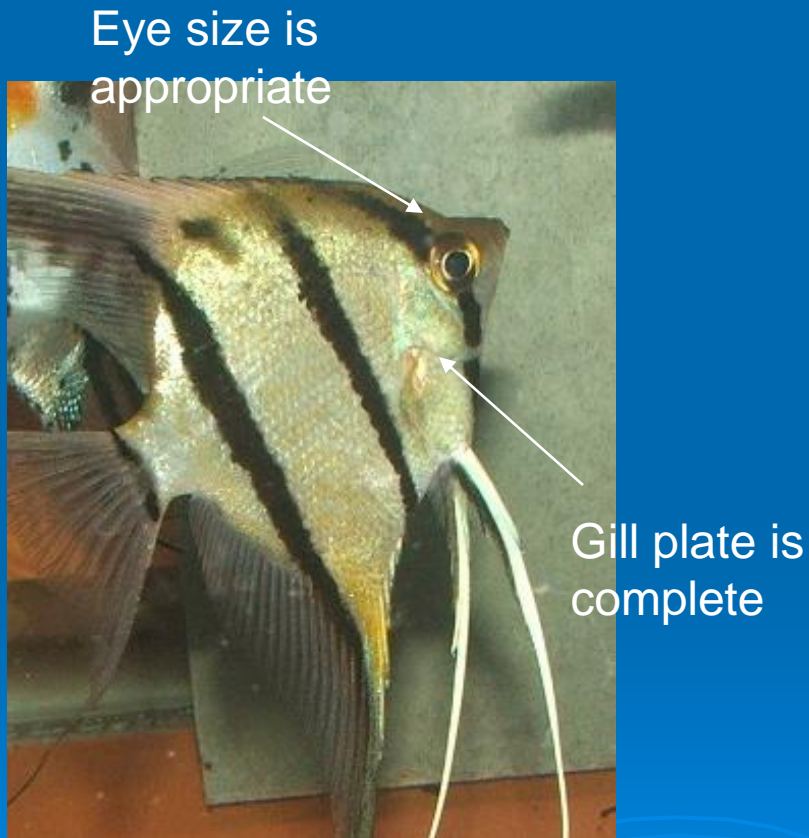
- Head profile should be smooth with no humps.
- A notch on the predorsal profile is acceptable, as is a profile without a predorsal notch, as both profiles appear in wild *Pterophyllum scalare*. Wilds of both profiles have been used in the development of domestic strains.
- The angelfish in this photo has a predorsal notch, but otherwise the crown has a smooth profile.

Size



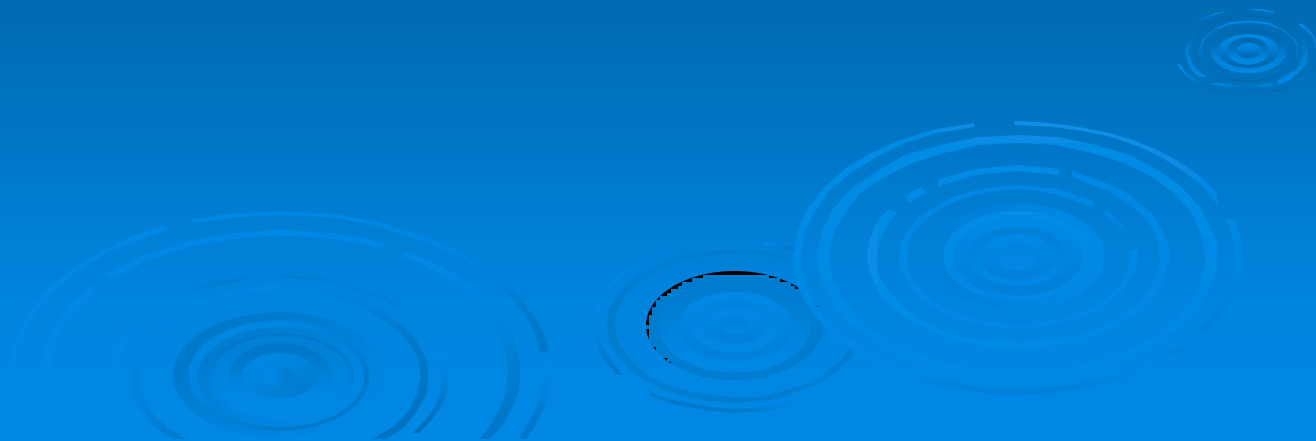
- Size should be appropriate for the age of the fish.
- Big is beautiful, and all things being equal, the larger fish is generally more desirable.
- This cannot be judged on juveniles unless the fish were in your possession from the beginning.

Other body features



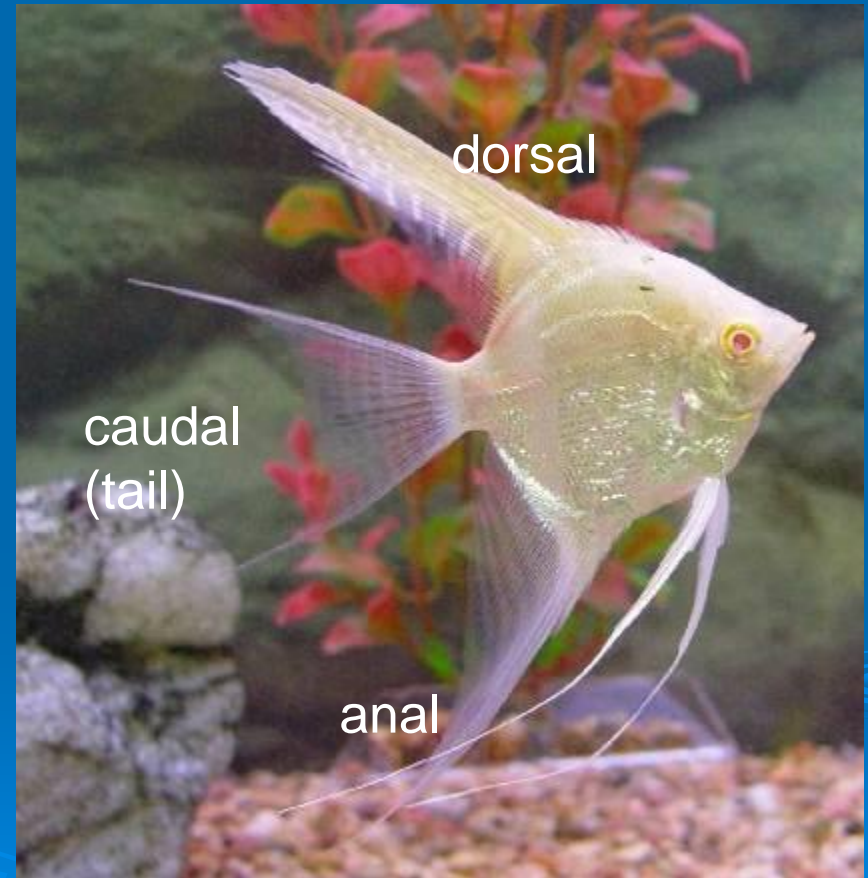
- Gill plates must be complete.
- No missing fins or parts to any of the fins.
- Eyes should appear appropriately sized for the fish's body. (Too large may be a sign of a stunted fish.)
- Eyes with more color are more desirable. Keep in mind that final eye color cannot generally be judged on juveniles.

Fins



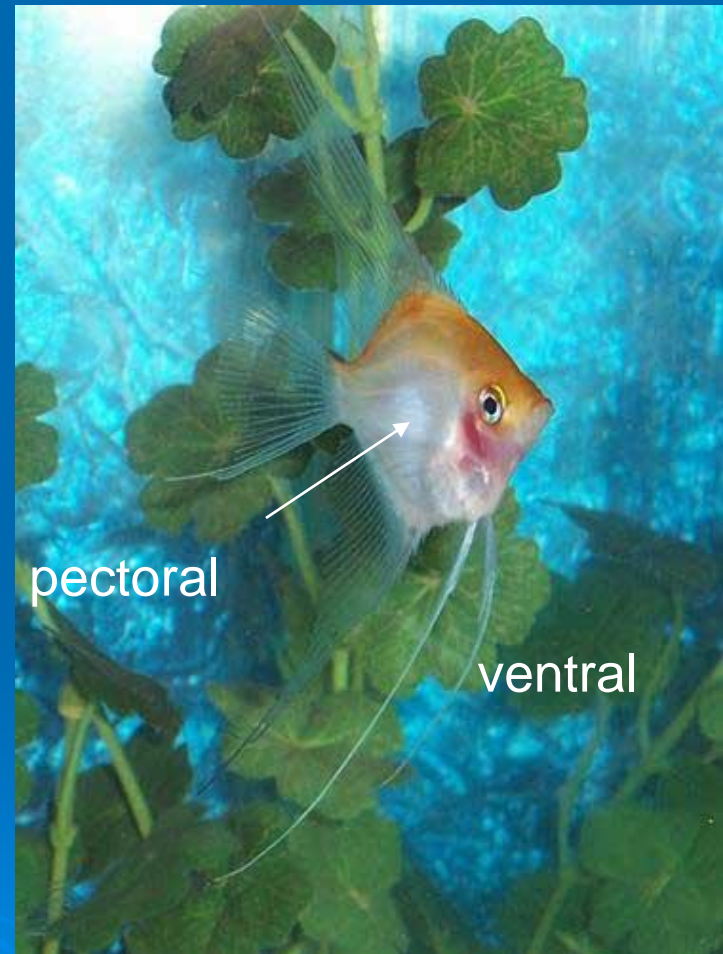
Unpaired Fins

- Un-paired Fins (dorsal, anal, caudal) should be straight without kinks or twists.
- We should breed for fish that have no curves in the dorsal, anal or caudal fins.
- Even with a superviseil, your goal should be to obtain a fish that comes as close to this criteria as possible.



Paired Fins

- Paired fins (pectoral and ventral) should be symmetrical. They should be the same size and angle on both sides of the body.
- Ventral fins should have a gentle curvature – no kinks or bends.



Veil and Superveil Considerations



Compare the length of the fins to the body of the veil angel on the left to the ones on the standard angel on the right.



- In veils all of the fins are lengthened.
- Given optimal water conditions and enough room the dorsal and anal fins will be straight or at most show a gentle rearward curve.
- Both the dorsal and anal fin should be about 1.5 to 2 times the body size in length, and equal to each other.

Straight fins

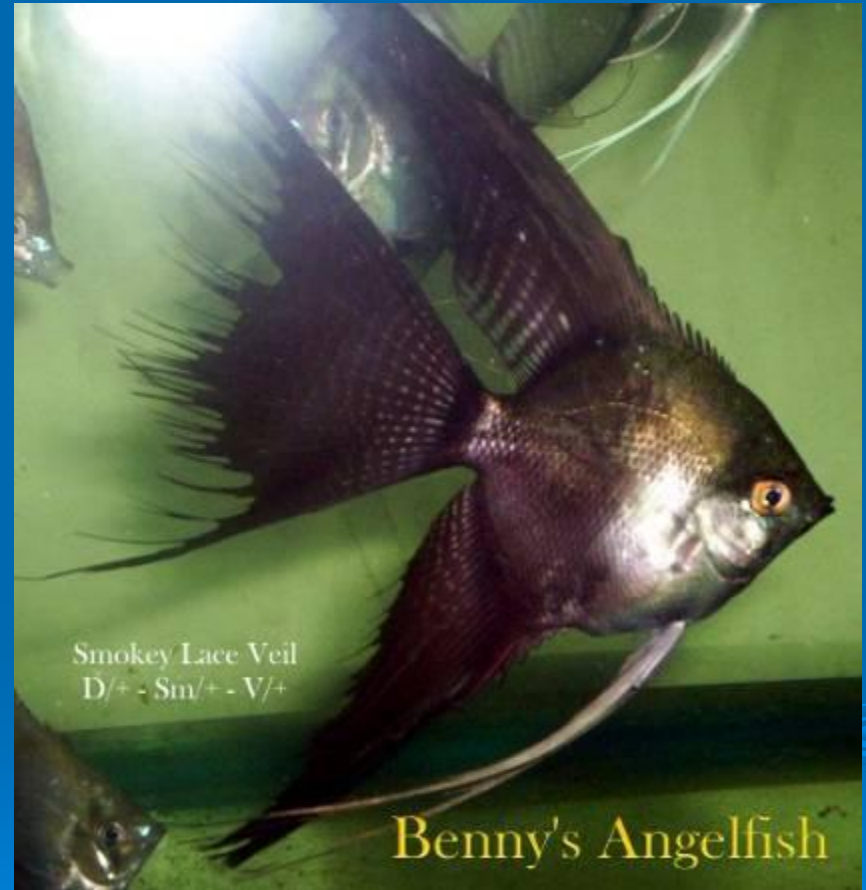


Note the straight dorsal in the superviseil in the foreground.

- Fish grown under optimal conditions have long straight fins; this is the standard against which all others should be judged. Any variation from this should be considered inferior.
- When water conditions or space are not optimal, the fins will often be shorter or more curved, especially at the top of the dorsal. In no instance should any of the fins show an acute bend.
- A fish with otherwise similar characteristics with straight fins should be judged ahead of the fish with a curve to its fins.

Caudal Fin

- The caudal fin (tail) can be variable. In single dose veils the caudal fin usually spreads out at about a 30 to 60 degree angle. Tails in the 45 to 60 degree range generally give better appearance. The wider the better.
- The trailing edge of the caudal fin should be straight or at least smooth and symmetrical if curved or scalloped. Trailing rays off of the top and bottom should be present.



This veil angelfish has an incredible tail spread of about 75 degrees!

Color and Pattern



Color and pattern

- Color and pattern should be as expected for the fish's phenotype.
- Stripes on striped varieties should run the complete height of the fish, the same as expected in wild caught fish. Stripes should be uninterrupted.



Pattern should be fully expressed

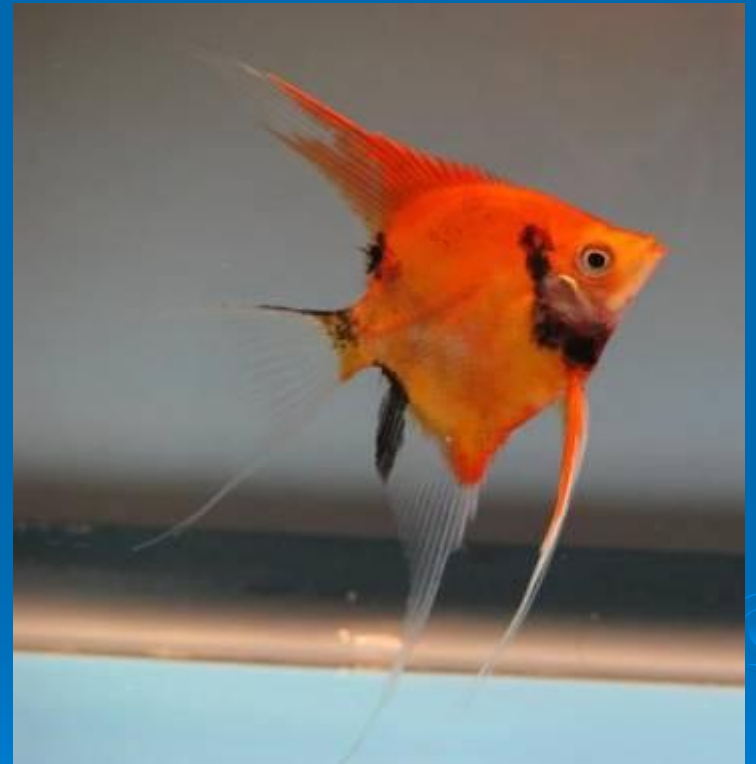


This zebra half-black shows full expression of the half-black trait. Note also the excellent red color of the eyes.

- Half-black should show the trait fully, not partially (such as only a black tail)
- Pearlscale when present should cover the majority of the body.

Color should be well developed

- Koi angels were named for their appearance when looked at from above being like koi (carp) due to the multicolors. Therefore a koi without good orange color is not show quality.
- The koi angelfish in the photo shows superb color development!



Department



What is Deportment?

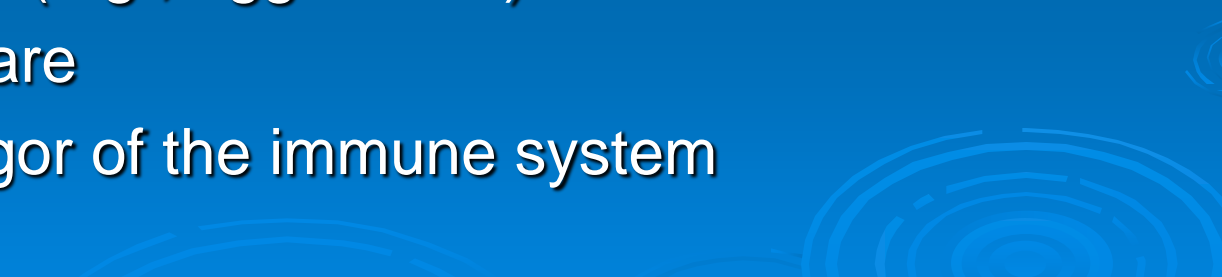
- An angelfish with good deportment will look alert and vigorously healthy.
- The fish will behave boldly and confidently – not fearfully – and will show interest in its surroundings. Fins will be erect and fully spread.
- Lack of good deportment can indicate poor or marginal health, lack of an optimum environment during growth, or poor breeding.



A Good Breeding Program

- Whether you are a hobby level or a professional breeder, you should aim for breeding beautiful angelfish with excellent conformation.
- You should also breed for the other, non-visible factors that are found in high quality angelfish.

Non-visible Factors

- Conformation Standards focus on the appearance of the angelfish.
 - Other factors are just as important, but are not easy to measure, and require a long observation period. These include:
 - Fecundity
 - Disposition (e.g., aggression)
 - Parental care
 - Genetic vigor of the immune system
 - Appetite
- 
- The bottom right corner of the slide features several decorative concentric circles, resembling ripples in water, rendered in a lighter blue shade than the background.

Observe your angelfish

- To select the best breeders, you should observe your angelfish over time. Select for angelfish that show
 - High fecundity - They should lay big spawns that have a high hatch-out rate.
 - Good parenting skills.
 - Good dispositions.
 - Consistently vigorous good health.
 - Longevity - If you have angelfish that live very long lives, their offspring are likely to live long lives.

We hope you have enjoyed this presentation.



Now hurry back to the meeting room
for Q and A and good discussion!