OBSERVATIONS

HYPOTHESIS

     When male bettas are exposed to each other for an extended period of time without being able to fight, their behavior will change, becoming less hostile.   This means that they will simply become "bored" of one another.

OBSERVATIONS

     Each experiment subject was detailed and allotted into one of the two initial experiments and one of the two trials for each experiment.  Experiment A is the pairing of male bettas into the same tank divided by a plastic sheet.  Experiment B consists of the use of a mirror within an individual tank of a male betta.

Subject 7:  Control.  Coloration:  Almost completely solid white.  Highlighted by random purple spots.

Subject 6:  Experiment A, trial 1.  Coloration:  Solid red.  Discolored scales near back end of fish.

Subject 5:  Experiment A, trial 1.  Coloration:  Turquoise, green fins. Brown head.

Subject 4:  Experiment A, trial 2.  Coloration:  Bluish-purple, red fins.  Blue highlight near edges of fins.

Subject 3:  Experiment A, trial 2.  Coloration:  Solid Blue.  Red pelvic fins.

Subject 2:  Experiment B, trial 1.  Coloration:  Greenish-brown.  Blue dorsal fin patterned by minute black spots.

Subject 1:  Experiment B, trial 2.  Coloration:  Solid red.  Darker hue of red on fins.

Day 1

     When the male bettas are exposed to each other, they attempt to attack one another.  The same thing occurs with the subjects exposed to mirror images.  The operculum, or gill flap, spreads outward, as the fins are spread open like a sail.  The dorsal, anal, as well as the caudal (tail) fin are all extended.  Most alternate between facing forward and a broadside display.  The majority of the actions can be seen as an intimidation attempt.

Day 8

    The altercations between the male bettas occur randomly throughout the observation.  It can be assumed that each betta is trying to establish its own territory. Thus when one comes in clear visual view of the other, the aggressive behavior can be seen.

Day 15

     The aggressive innate behavior of the male bettas seems to be dwindling.  They appear as though they have discovered that their territory is limited, and they only begin to display aggressive behavior during feedings when the one is feed while the other has to wait.

Day 22

     Both trials of Experiment B are a success.  When the test subjects come into direct visual contact with their reflection, or when they are being fed, no aggressive action can be seen.  One trial was logged at 19 days for the disappearance of aggressive behavior, other occurred today.  However, the subjects in Experiment A still attempt to attack one another, especially during feedings.  A possible hypothesis on coloration may be formulated as well, to which the reaction of a male betta may be less hostile if its "intruder" shares the same coloration.  Or possibly, a subject may not be influenced as much by another of the same coloration after an extended period of time.

Day 29

     The subjects in Experiment B still have not been seen displaying any aggressive behavior.  One pair in Experiment A, also appear to have revealed the same outcome of those in Experiment B (logged at day 25).  The other pair still display hostility.

Day 36

     The test subjects of the second trial have also concluded as the other experiments have (logged at 31 days).  It actually seems that no single male betta has retained its innate agnostic behavior.  This supports the hypothesis in that each individual's behavior changed, to where that no hostilities between neighboring males seem to exist.

     The secondary experiment however was a failure.  After seven days of separation from each other, the bettas were placed back into their initial testing format.  Unfortunately, each male betta resorted back to its original aggressive behavior.

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