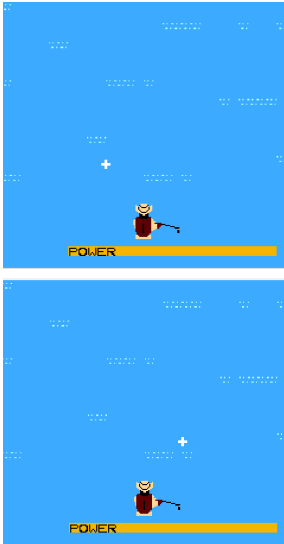

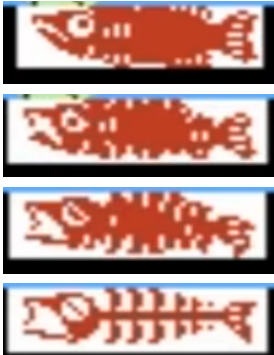




Technical Design Document: Black Bass Fishing

(AKA: Rules for BBF NES Programmers)

Mechanic	Rules/Descriptions	Images	Extra Info
Aiming	<ul style="list-style-type: none">• Player turns in a roughly 30 degree (15 degrees to the right or left) arc from spawn.• Player has 16 inputs between the max left and right distance they can turn• Player must manually input each increment of their turn• Aiming is indicated by a + reticle		<ul style="list-style-type: none">• We could modify some elements to increase useability but we should run any fundamental changes by Project Lead
Casting	<ul style="list-style-type: none">• Player starts casting by pressing A (Z on keyboard)• Cast strength is indicated by a blue bar that oscillates between max and min strength.• Player must press A again to cast the line when the bar is at a desired level		<ul style="list-style-type: none">• Bar takes about 1.5 seconds to fill• Player CAN cast lure out of bounds/off screen, resulting in a lost lure and a stage reset• When casting from the center of the screen there's a slight chance for the line to drift to the left or right by about 3 degrees. This might be to simulate wind

Reeling	<ul style="list-style-type: none"> • Player slowly reels in the line by pressing Left and Right on keyboard • Left and Right inputs no longer require multiple button presses in this phase (player can press and hold either input) • Player are no longer limited to the 30 degree casting limit and can move the line the full width of the screen • Player can press and hold A with no other directional input to quickly reel in the line • There's a sound effect when the player inputs Left or right with the lure and a different audio que when they quickly reel in the line • Quickly reeling will drag the lure to the center of the screen. • It takes about 8 seconds to reel from the top edge of the screen to the bottom 		<ul style="list-style-type: none"> • Exact rate at which the player reels in their line appears to be 5 pixels a second for a normal reel and about 10-15 for a quick reel • Not selecting a cast strength resets the bar and requires another A input to cast again
Lure	<ul style="list-style-type: none"> • Different lures affect how the line sinks • The depth of the line is indicated in feet (displayed as "ft") in on the power bar • The lure becomes a silhouette once it sinks below 6 feet • Lure can sink to the max depth of the area (usually between 9 and 10 ft) • Moving the line left and right makes it sink faster • Idling causes the lure to rise 		<ul style="list-style-type: none"> • Lure have their own unique sprites and are motivators of progression • Players can only bring a few before a fishing run, so they had to be careful • Neither the basic bait (pencil bait) nor the frog bait sink • Shallow runner is the only lure I could find that sunk • The lure used appears above the power bar

Hooking	<ul style="list-style-type: none"> Occasionally when you cast, a fish silhouette will appear and swim towards your lure The fish moves slightly faster than the rate at which the screen scrolls when you're slowly reeling in your bait The player can repeatedly input a direction and to wiggle the line closer to the fish Fish spawning seems pretty rare but the player can check the data of a given spot to see if it's good for fishing 		<ul style="list-style-type: none"> Optimal strategy for hooking a fish seems to be inputting Left and Right in short bursts. This slows the vertical reel rate to a crawl while still keeping it horizontally mobile, as a fish loses interest in a static lure Hooking is part of a the core trial and error loop since the player can only check the data of a spot after one fishing attempt Besides this trial and error there is no other indicator of fish in a location
Fish	<ul style="list-style-type: none"> The game suggests fish will spawn in areas by labeling areas "good" or "bad" for bass - with spawn rate depending on the area Fish will almost always spawn at the edges or top of the screen and inch towards the bait. Fish have a certain radius for detecting bait and leave once the bait exits this radius or stops moving. 		<ul style="list-style-type: none"> For ease of use, we'll be cheating for this by making sure a fish spawns every 3 or so casts (33%)
Time limit	<ul style="list-style-type: none"> There's a limit on the time you have for fishing, approx 4 real world hours Once it passes, the player either advances to the next stage or ends the game 		<ul style="list-style-type: none"> We should cut this mechanic since it doesn't really make sense for the museum
Stamina	<ul style="list-style-type: none"> Once hooked, the fish will begin to fight against the line and a stamina indicator in the shape of the fish will appear The bar will change as the fish fights against the line, showing the fish becoming weaker The fish sprite also changes as it fights. Tired fish will turn sideways and float closer to the surface 		<ul style="list-style-type: none"> There are 4 stages of fish stamina, each shown to the left

<p>Line strength</p>	<ul style="list-style-type: none"> • The strength of the line is also a factor when reeling in a fish. <ul style="list-style-type: none"> ○ Stronger lines make it easier to catch and tire out bigger fish. ○ Weaker lines put a gate on the type of fish you can catch • When reeling, and audio cue will play if the line is close to breaking 		<ul style="list-style-type: none"> • Breaking a line results in a lost lure 																								
<p>Text boxes</p>	<ul style="list-style-type: none"> • The game also has some text boxes and prompts to show various game states 	 <p>OH! THE FISH HITS! FIGHT!</p> <p>GOOD LUCK!</p> <p>TODAY'S RECORD</p> <table border="1"> <tbody> <tr> <td>BLACK BASS</td> <td>7.7Lb</td> <td>6:33</td> <td></td> </tr> <tr> <td>PENCIL BAIT</td> <td></td> <td></td> <td>SILVER</td> </tr> <tr> <td>BLACK BASS</td> <td>6.9Lb</td> <td>7:25</td> <td></td> </tr> <tr> <td>PENCIL BAIT</td> <td></td> <td></td> <td>SILVER</td> </tr> <tr> <td>BLACK BASS</td> <td>4.3Lb</td> <td>6:58</td> <td></td> </tr> <tr> <td>PENCIL BAIT</td> <td></td> <td></td> <td>SILVER</td> </tr> </tbody> </table>	BLACK BASS	7.7Lb	6:33		PENCIL BAIT			SILVER	BLACK BASS	6.9Lb	7:25		PENCIL BAIT			SILVER	BLACK BASS	4.3Lb	6:58		PENCIL BAIT			SILVER	<ul style="list-style-type: none"> • Text box appears for catching a fish and loading into a stage • There's also a fishing inventory that stores all the fish they caught in one 'run' • "Good Luck" loaded every time you started a fishing run • See google drive for more detailed images
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<p>Fish stats</p>	<ul style="list-style-type: none"> • Tracks weight, length, fight time, and lure used 	 <p>BLACK BASS</p> <p>7.7Lb</p> <p>6:33</p> <p>FIGHT TIME</p> <p>0:24</p> <p>LURE</p> <p>PENCIL BAIT</p> <p>SILVER</p> <p>IT'S BIG!</p>																									

Codes

- These tracked player progress and were displayed when you won
- This is a neat relic of an era when save states were harder



- These don't seem necessary for the museum but it would be fun to include them as easter eggs