TO HAND FEED, OR NOT TO HAND FEED?
That is the question???

By Diane Deal, Supervisor – Lookingglass Fish Hatchery
WITH LOOKINGGLASS HATCHERY’S PROGRAM, HAND FEEDING WORKS BEST.
OTHER HATCHERIES USE AUTOMATIC FISH FEEDERS SUCCESSFULLY.

Garon Auto Feeder for outside raceway feeding.  Neilsen Auto Feeder for inside trough feeding
Reasons LGH hand feeds versus using automatic feeders

1. To be up close and personal with our fish; At ponding we make sure the fry get a good start in life with careful hand feeding practices. In the raceways, we watch how the fish feed, growth rate and condition factor; watch for potential pathogen issues; predation, water condition, etc.

2. Cost savings; No electricity used, no maintenance or repair issues; Replacement cost for new feeders was between $900 to $1,735 per feeder x 2 feeders per raceway, not including shipping or infrastructure change costs which could easily go up to thousands of added $$$$$.

3. Additional cost savings; You aren’t wasting feed if you are watching how your fish eat; stop feeding when they stop eating – feed the fish, not the pond.

4. Monitoring auto feeders can be labor intensive.

5. Scheduling Fish Culture activities such as: Ponding and starting fry; Interrupting auto feeding for reasons such as: tagging/marking, transporting fish, or monthly sampling, etc.

5. Time frame of use – the next slide explains...
Lookingglass Hatchery wanted to replace their automatic feeders for the raceways, due to aging equipment, constant repairs, and difficulty finding replacement parts. LGH was surprised to find how little we used the auto feeders when actual time used was calculated. The juveniles were ponded into raceways the first two weeks of May and hand fed the smaller feeds to get them feeding well outdoors. By the first of June, the fish were accepting feed well and the feed size was large enough for the auto feeders to dispense efficiently, so LGH started up the feeders. On July 1st medicated feeding began and was hand fed through the 28th. After medicated feeding the auto feeders were once again used until Marking/Tagging began in mid-August to the end of August. The fish were hand fed through marking and formalin treatments until the first week of September. Finally, all the raceways were on auto feeders through September. Colder weather after Sept. 30th interfered with the efficient functioning of the auto feeders so they were shut down for the winter.

So, 4 weeks in June, 2 weeks in August plus 4 weeks in September = 10 weeks or 2 ½ months of use.

In addition – We stopped using the Neilsen feeders inside of the Hatch House. All fry were hand fed from ponding. The Neilsen feeders didn’t work well with smaller feeds and when the feed size would dispense correctly in the feeders, the fish sizes were ready to be ponded outdoors in the raceways.
Fish Feed Savings by Hand Feeding

Catherine Creek, 201 Stock, the month of July
BY 2012 – last year the automatic feeders were used – Food Conversion – 1.51
BY 2013 – first year all fish were hand fed – Food Conversion – 1.23
BY 2014 – second year all fish were hand fed – Food Conversion – 0.92

BY 2012 – 8,800 lbs. feed ~ BY 2013 – 8,272 lbs. feed ~ BY 2014 – 7,040 lbs. feed. Even with feed costs increasing each year, in BY 2014 there was over a $2,000 savings.
IN Conclusion...

Because of:

• Overall good fish health, food conversions, etc.

• Cost savings in several ways – Electrical savings, repair/maintenance savings, fish feed savings (less needed), replacement of feeders and infrastructure savings, etc.

• The actual time frame the auto feeders were used (or lack of).

*LGH made the decision to remove the auto feeders and go to 100% hand feeding.*