

Zebrafish International Resource Center

Printing Labels

The labels in our aquaculture rooms are of the type "Thin Self-laminating Polyester". These labels generally best handle exposure to moisture. We have been ordering our labels through a company called Cils, see address below, though, there are many other companies that sell labels. To print a Bar-code on the label we use the font "3 of 9" which is available to download from the web free-of-charge. Many bar code fonts are restricted to numeric characters. We chose the "3 of 9" font because it allows for alpha-numeric barcode representations. One downside of this barcode font type is its lower resolution, maximum of approximately 6 characters, in barcode format, per inch. A printer with a high resolution will allow for a few more characters per inch. The Zebra printers we use, see description below, have a resolution of 200 dpi. Zebra sells other printers with a higher resolution (dpi).

Most of the labels we generate are of the following type,

- 1) 3" x 1" polyester label - Used for tank labels, containing fish id information (includes a bar code of our internal fish stock number).
- 2) 2" x 0.5" polyester label – Used for tank location tags placed on the metal rack immediately below the tank. The label contains the tank location in text and a bar code (3 of 9 font). The text is for visually locating a tank and the bar code is use for inventory using a hand held bar code reader.
- 3) 1.5" x 1" + 2.25" laminate wrap label - Used to label the tubes containing frozen sperm stored in liquid nitrogen containers. These labels are special order from Cils, and quite expensive (approx. \$900 per 1000 labels).
- 4) 4" x 3" paper labels – Used for shipping address/information labels. We don't always order paper labels through Cils.

Cils:

Computer Imprintable Label Systems LLC
900 Cummings Center, Suite 206T
Beverly, MA 01915
(978) 921-8877

Label Printers:

The polyester labels require a media type of "thermal transfer" which uses a ribbon. The other media type, "Direct" does not require a ribbon. The "T" in Zebra's TLP model stands for "thermal transfer".

- Zebra TLP2844 model (this model uses "thermal transfer" method to print labels) connects directly to a Windows XP based PC. Certain PC's have been set up to use these dedicated printers.

- Zebra TLP2844 model with TCP-IP adaptation connects to the network and is available to any PC in the office that has installed the TLP2844 printer driver software. Zebra does not have a printer driver for Mac's but we are looking into purchasing a printer driver offered from a third party. Our staff is split between using PC/Windows and Mac/OS X as desktop/laptop computer.
 - Zebra LP2844 mode ("direct" method) is used to print our paper labels.

Software:

Currently, we print labels while in FileMaker (our database). We are moving to web based system to maintain our database using php/mysql. When this is complete we will be printing labels from web page forms, but we're still a ways out before this happens. The Zebra printers we use come with print drivers, but only for Windows based machines. In areas of the building where labels are needed we have general use Windows PC's. In our office roughly half the staff have Windows based machines and the others Mac OS X, so half the staff cannot print to the Zebra printers. We are looking at purchasing a third-party software vendor, <http://www.peninsula-group.com>, to supply us with a print driver for the Mac OS X and Zebra printer environment.