

# **SPAWN Stream Naturalist Training Manual**

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## ***Dear Naturalists:***

Welcome to SPAWN's Creek Naturalist Program! Each winter as the beautiful and endangered salmon complete their long journey home to spawn, we have the joy of observing their behavior at close range and on a regular basis. In learning, and teaching our guests, about this watershed and the salmon who play such an important role in the ecosystem, we've found that serving the land and its creatures feeds us, sometimes in unexpected ways.

Every winter our naturalists guide approximately 500 people to the best salmon-viewing spots, educating them about the importance of protecting the watershed from changes that further devastate the threatened populations of salmonids who have returned to this creek system for thousands of years. We hope, in these salmon-viewing tours, to provide our guests with an enjoyable and exciting learning experience that will spark their curiosity and passion to protect and serve the earth.

We are here to help and support you in your own forays into the world of Lagunitas Creek salmonids. Please call or email myself, Paola Bouley or Todd Steiner for help with any aspect of your SPAWN naturalist experience. Our email addresses and phone numbers are listed in the appendix.

Thank you for joining us in this rewarding work! Have fun out on the creek!

Cheers,

The SPAWN Crew

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# Section I: About SPAWN

## ***Mission Statement***

The Salmon Protection And Watershed Network (SPAWN) works to protect endangered coho salmon and threatened steelhead and the environment on which we all depend. We use a multi-faceted approach including grassroots action, habitat restoration, policy development, environmental education, media campaigns and litigation.

## ***Goals and Programs***

SPAWN's goal is to effectively accomplish community-based projects focused on improving threatened populations of salmon and steelhead and countless other species that depend on a healthy watershed. SPAWN engages in creek habitat restoration, education and outreach, spawning salmon population monitoring, juvenile salmon rescue and relocation, water quality testing, agency watchdogging, advocacy, creek emergency response, land acquisition and protection and sensitive watershed resources.

## ***Accomplishments and current projects***

Because SPAWN has only a single full-time employee (Paola Bouley, Watershed Biologist), most of our projects depend upon volunteer commitment. If you're interested in participating in, or leading any of our current projects, please sign up today!

## **Volunteer Opportunity!**

- This year, we partnered with the San Geronimo Valley Golf Course, one of the largest landowners in the Lagunitas Creek Watershed, to give back 5,600 square feet of its greens and allow SPAWN to recreate riparian habitat along critical portions of San Geronimo Creek. Volunteers have already made great progress on this project!

In 2005 SPAWN volunteers:

- Built a 550-ft protective fence along the creek;
- Restored 90-ft of failing creek bank using cutting-edge bioengineering techniques;
- Began propagating and planting thousands of native plants along a 650-ft stretch of San Geronimo Creek on the golf course.

*The project brought together many restoration partners, including the Marin Resources Conservation District, Regional Water Quality Control Board, CA Department of Fish and Game, National Fish and Wildlife Foundation, PG&E, San Geronimo Golf Course, and of course, many SPAWN volunteers!*

If you are interested in helping to grow native plants and restore creekside habitat, this project is for you!

### **Volunteer Opportunity!**

- In 2006, we will build a Rain Garden/Rain Catchment project at the Lagunitas School. The goal of this project is to begin to provide an inspirational series of replicable, and ecologically responsible models for storm-water management in the Lagunitas Watershed. Our design includes diverting rainwater from the school roof to feed a cistern that will in turn provide water for the School Garden during the dry season. With the help of local school children we will also build vegetated, sediment- and pollutant-catchment basins around problematic stormdrains on the campus, using native grasses and wetland plants. Lagunitas kids will also be collecting and growing out native plants for this project.

### **Volunteer Opportunity!**

- This year, we began a pilot native plant nursery on a plot of land kindly donated to us by a local valley resident. Volunteers are needed to collect local plant materials, clean native plant seeds and cuttings, propagate native plants, tend the nursery and water our baby plants, build shelving and other nursery storage containers, and research propagation techniques.

Rose Roberts' Seed Collection Workshop



Photo courtesy of Reuven Walder

### Volunteer Opportunity!

- Every year since 1999, we've involved hundreds of volunteers in rescuing and relocating over 15,000 juvenile fish from local creeks. Fish rescue and relocation is one of our most popular volunteer efforts, especially fun for children. It begins in early summer when small tributaries begin to dry up, trapping fry in small puddles. Under the supervision of one of our R&R crew leaders, we dipnet the fish and move them to spots in the main stem of the creek, where they will have a chance to survive.

Coho fry bound for the main stem



Photo courtesy of Reuven Walder

### Volunteer Opportunity!

- Since 1999, we have recruited and trained Stream Naturalists to lead creek walks for the public to view the magnificent spawning behavior of coho, Chinook, chum and steelhead. Through this program, we've educated over 5,000 people from across the Bay Area about the ecology of endangered salmonids and the impacts they face in our watershed and worldwide.

### Volunteer Opportunity!

- SPAWN volunteers are conducting water quality monitoring with the Regional Water Quality Board to determine Total Maximum Daily Loads (TMDLs) of key pollutants for the Lagunitas Watershed. Our water quality team tests water from the tributaries of the San Geronimo and Lagunitas Creeks in both winter and summer for several factors that can affect public health and the health of the aquatic ecosystem.
- SPAWN has surveyed the major barriers (culverts, dams) to salmon migration in the San Geronimo Valley and completed conceptual designs for replacement or modification of six priority culverts that act as barriers to migration.
- SPAWN has surveyed private dirt roads in the San Geronimo Valley, calculated their sediment load input into the creeks (a known limiting factor to successful nesting and rearing) and has prioritized them for repair.

- In 2005, we won a precedent-setting legal case, successfully arguing that new, single-family homes are not exempt from environmental review if they are being planned near sensitive riparian habitat adjacent to salmon-bearing streams. The developer and County pursued the case through the State Appeals Court and even petitioned the California Supreme Court to hear the case, but were denied. Acting on our petition, this important unanimous decision was published by the Appeals Court (only 1 in 10 decisions are published!). This decision has temporarily halted Marin County's continuous granting of permits to develop creekside habitat without important environmental review, and has provided a legal tool for watershed organizations throughout the State to protect riparian habitat in their own regions. **SPAWN is currently urging the County to immediately conduct a Cumulative Impact Study to determine the cumulative impacts of development for the Watershed as a whole.**
- SPAWN, in coalition with Trout Unlimited, Mark Warner (Performance Excavators), federal fisheries officials, the San Geronimo Valley Golf Course, and workers at various county agencies completed a three-year project to transform Roy's Dam, a barrier to miles of upstream habitat, to Roy's Pool, a series of jump pools that help coho and steelhead reach their upstream spawning habitat.
- We worked with the S.P. Taylor State Park to develop a report of fish-friendly management recommendations and organize restoration days to improve spawning habitat.

## ***Training Schedule, 2005***

Field trainings: October 29 and 30, 10AM to 4PM

Evening Seminars: Ongoing, Winter 2005

Regional Salmonid Populations: Brannon Ketcham, Monday, November 7

Current Research on Lagunitas Creek: Leslie Ferguson, Tuesday, November 29

The Inner Secrets of a Redd: Matt Sloat, Thursday, December 8

Late Winter:

Riparian Plant Communities, Riparian Bird Communities, and Local Amphibians and Bats

Dates and Speakers to be announced.

## ***Creek Walk Schedule, 2005-6***

Creek walks will begin in November. Normal creek walk schedule is Saturdays and Sundays, leaving the San Geronimo Valley Community Center at 10AM and 1PM. We'll add creek walk days during the Thanksgiving and Christmas holidays. A creek walk calendar will be provided during the field training, and volunteers can sign up for their walks. We ask each volunteer to agree to lead two creek walks per month for November, December and January.

We will try to have two naturalists leading each walk this season, depending upon availability. We're asking new naturalists to team up with experienced naturalists for the first few walks in order to complete their training.

Creek walks leave rain or shine, and the weather is seldom so bad that we have to cancel a walk. The number of guests on a walk varies from 2 or 3 to 25 or 30 people.