

San Francisco Bay Area Master Birder (MB) Program

Concept: Provide a unique opportunity for experienced Bay Area wild bird enthusiasts to:

- Enhance participant's abilities to properly identify birds of Northern California by sight and by sound
- Increase participant's knowledge of California birds' natural histories including intermediate ornithology, general ecology, habitat requirements and conservation methods
- Learn basic field ornithology skills for monitoring and documenting observations
- Empower students in a variety of outdoor and environmental leadership skills and experiences

Participating Organizations: California Academy of Science (CAS) and Golden Gate Audubon Society (GGAS)

Primary Classroom Venue:

CAS – Classroom, labs and collections, various field trip locations

Instructors: Jack Dumbacher, Eddie Bartley, Bruce Mast (may also include visiting experts on some subjects)

Number of participants: minimum 15, maximum 20

Course fee \$1,120 (\$895 for CAS or GGAS members)

Minimum requirements to register for the course:

1. Ability to identify birds at an "Intermediate" level
 - a. ID by sight 100 California species
 - b. ID by sound 25 California species
2. Agree to volunteer at least 100 hours to any MB Program Participating Organizations or other approved environmental organization over a two year period.
 - a. The intent is to increase awareness and involvement in local wildlife education and conservation programs. The type of involvement you choose is entirely up to you.
 - b. Hours spent during MB Program training do not count towards this requirement.

Length of course: One year, including

1. Eleven 2.5-hour MB Program classroom presentations and/or labs
2. Eleven 3+ -hour MB Program Field Trips
3. Two student presentation salons

Requirements for successful completion of MB Program (Certification):

1. Participate in at least
 - a. 70% of MB Program class presentations
 - b. 70% of MB Program Field Trips
2. Create and maintain a field notebook (paper and/or digital) that includes each of the elements of a Grinnell-style field journal, including
 - a. Species list and count
 - b. Date seen
 - c. Location
 - d. Habitat type

Students should aim to document sightings for at least 200 bird species in California over the course of the year.
3. During field and class experiences led by MB Program guides and instructors over the course of the program, students should learn to:
 - a. Identify 100+ species by sight
 - b. Identify 40+ species by sound
 - c. Identify 25+ bird important plants by sight
4. Correctly answer at least 75% of questions on a written exam
5. Participate in at least one Christmas Bird Count
6. Organize and lead at least one bird field trip
7. Participate in at least 20 organized natural history field trips (Any organization; Master Birder Program outings count toward this total)
8. Select and maintain a local bird “patch” list at least twice a month over the course of the MB Program
9. Complete a Breeding Bird Atlas form of at least 5 visits to the student’s “Bird patch”
10. Complete at least one Rare Bird Form (species does not have to be CBRC listed)
11. Complete Species Profiles of one California bird
12. Submit a two-to-five-page written research paper based on any bird related topic with at least three authoritative citations
13. Make a 10-minute presentation to the class on any topic on birds of your choice
14. Bird at least ten eBird hotspots and complete a trip report for each.
15. Over the course of the MB Program plus one calendar year (2 years total) complete and substantiate at least 100 volunteer hours directly related to bird conservation and education such as
 - a. Bird-related community science project such as Christmas Bird Count, Breeding Bird Atlas, or GGRO Hawk Watch
 - b. Habitat restoration
 - c. Community education, e.g., docent, field trip leader, public speaker
 - d. Volunteer hours on behalf of an environmental nonprofit
 - e. Participate in a bird conference or festival

Tentative Lecture Schedule

Class Dates (All Wednesday evenings 6:30- 9PM) - meeting at the California Academy of Sciences. Dates are subject to change.

Date	Topic
February 8	Presentation = Program introduction, student introduction, Photos?, schedules, field trip logistics, exams, requirement fulfillment: participation, field notebook, volunteer & citizen science opportunities, papers, student presentation. Lab = Waivers, Intro to collections & tour. Skins: Aythya Ducks
March 8	Presentation: Bird Song Lab: Flycatchers, Vireos
April 5	Presentation = Taxonomy & Systematics of birds Lab = Bird orders & families; Rails, Warblers
May 3	Presentation: Bird Behavior: breeding, etc. Lab: Swallows, Thrushes, Wrens, Creeper, Nuthatches, Chickadees & Tits
May 17	Presentation: Anatomy 1 - inside of the bird (skeletal, muscle structure, organs, etc.) Lab: Dissection of a specimen
June 14	Presentation: Anatomy 2 (Bob Lewis guest lecture?) - outside of the bird (legs, bill, feathers, soft parts, etc.) Lab: Loons, Grebes, Cormorants, Hummingbirds and Swifts
	NO JULY MEETINGS
August 2	Presentation: Nutrition, population dynamics, feeding behavior, migration I Lab: Shorebirds, Gulls, Terns
September 6	Presentation: Seabird Ecology (Alvaro Jaramillo) Lab: Pelagic birds: Tubenoses, Skuas, Jaegers, Alcids
October 4	Presentation: Birds from the ground Up, Where and When, migration II Lab: Raptors
November 1	Presentation: Migration III, orientation, flight Lab: Icterids, Pipits, Waxwings, Sparrows, finches
December 6	Presentation: Conservation, "state of the birds", Student Presentations (?), Certification review and evaluations Lab: Western Owls, Nightjars

There are also two Student Presentation evenings in November and December, also 6:30-9 PM. Dates TBD.

Tentative Field Trip Schedule

Field Trips are at various start times and lengths but typically 3 hours in the morning. A couple of special trips will go early to experience dawn chorus, and there are some optional extensions on some trips, and one full day grand finale (Dec 9). Tentative field trip dates are planned for the following Saturday dates:

Field Trip Date	Meeting Places to be provided
February 11	Lake Merritt and Middle Harbor Shoreline Park (Oakland) - Ducks, shorebirds, bay, brackish lake, saltwater marsh, incoming tides
March 11	Coyote Hills Regional Park - Raptors, songbirds, Bay, grasslands, saltwater marsh
April 8	Valle Vista Staging Area, San Leandro Reservoir - Breeding behavior, bird song, migrants
May 6	Mitchell Canyon, Mt. Diablo State Park - Oak woodland and riparian habitat, terrestrial migrants
May 20	Mori Point and Fitzgerald Marine Reserve - song focus OPTIONAL DAWN CHORUS 5:30 AM
June 17	SF Land's End - Hummingbirds, Rocky Shoreline, parkland
	No July Field Trips
August 5	Hayward Regional Shoreline at Grant Avenue , shoreline habitat - shorebirds.
September 16	Point Reyes National Seashore , including Bear Valley Visitors Center and outer point (Drakes Beach, Fish Docks, etc) many habitat types, migration
September 30	Marin Headlands: Rodeo Lagoon and Hawk Hill - Raptors, swifts, migration
November 4	Bodega Bay - coastal habitats, ducks, shorebirds, waders, actual location dependent upon fishing/crab season
December 9	Cosumnes River Preserve and Staten Island - Cranes, ducks, raptors, shorebirds, songbirds (all day)