**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
* Increase participant’s knowledge of California birds’ natural histories including intermediate ornithology, general ecology, habitat requirements and conservation methods
* Empower students in a variety of outdoor and environmental leadership skills and experiences

**Participating Organizations:**

1. California Academy of Science (CAS)
2. Golden Gate Audubon Society (GGAS)

**Potential Venues:**

CAS – Classroom, labs and collections, field trip combo

**Instructors:**

Jack Dumbacher

Eddie Bartley

Bruce Mast

(may also include visiting experts on some subjects)

**Number of participants**: min/max = 10/20

**Course fee** $750 ($650 for CAS or GGAS members)

**Minimum requirements to register for the course:**

1. Ability to identify birds at an “Intermediate” level
	1. ID by sight 100 California species
	2. ID by sound 25 California species
2. Agree to volunteer at least 100 hours to any MB Program Participating Organizations over a two year period.
	1. 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.
	2. 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
4. Classes will start in February, and will generally be on the first Wednesday of each month with a few exceptions: 1) There will be no class meeting or field trip in July, 2) there will be an additional class meeting in May followed by a fieldtrip, 3) some dates are shifted to hit or avoid other peak events (e.g. fleet week, crabbing season, migration periods). More details about exact dates will be given at the first class meeting.
5. Two additional evening classroom sessions will be scheduled to permit students to present their 10-minute topics, in the fall of 2020 (usually in October and November).

**MB Program presentation topics:**

1. Master Birder course Introduction / field note taking / bird reporting
2. Avian evolution, systematics and taxonomy of birds.
3. Anatomy and Physiology
4. Migration and flight mechanics
5. Breeding, behaviors, Bird Song, etc.
6. Ecology – habitat requirements, feeding, population dynamics
7. Advanced Western Bird ID – the hard stuff (to be spread out over class meetings)
	1. Anseriformes – Scaup, Swans, Ross/Snow
	2. Loons & Grebes
	3. Pelagics, Jaegers, Alcids
	4. Cormorants
	5. Raptors – Accipiters, morphs, sub-species, etc.
	6. Rallidae
	7. Shorebirds – Plovers, Dowitchers, etc.
	8. Gulls & Terns
	9. Western Owls & Caprimulgidae
	10. Apodiformes – Hummingbirds & Swifts
	11. Passerines
		1. Empidonax, Myiarchus, Tyrannus
		2. Vireos
		3. Catharus Thrushes
		4. Fall Warblers
		5. Sparrows – Spizella, Ammodramus, Longspurs
		6. Haemorhaus Finches, Crossbill types
8. Conservation & Citizen Science
9. Final Exam

**Requirements for successful completion of MB Program (Certification):**

1. Participate in at least
	1. 70% of MB Program class presentations
	2. 70% of MB Program Field Trips
2. Create and maintain a field notebook (paper and/or digital) that includes the number of species identified on each field trip
	1. Identify and list at least 200 bird species in California by
		1. Species
		2. Date seen
		3. Location
		4. Habitat type
3. During field and class experiences led by MB Program guides and instructors over the course of the program:
	1. Identify 100+ species by sight
	2. Identify 40+ species by sound
	3. 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 Birding Program outings count toward this total)
8. Maintain a backyard bird list (or local bird patch) 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 students “Bird patch”
10. Complete at least one Rare Bird Form (species does not have to be CBRC listed)
11. Complete Species Profiles of at least two birds each from different habitat types
12. Complete the SF Bay Area MB Program Guide to California Habitats and Birds \*\*
13. Submit a two to five page written research paper based on any bird related topic with at least three authoritative citations
14. Make a 10 minute presentation to the class on any topic on birds of your choice
15. Field Activities: Participate in at least 5 of the following events or projects over the course of the MB Program:
	1. Participate in a habitat restoration activity
	2. Participate in an organized bird survey
	3. Participate in an organized Bio-blitz (all species) survey \*\*
	4. Volunteer at a wildlife rehabilitation center
	5. Complete an advanced Ornithology class through a SF Bay Area Audubon Society, City College, Cornell Lab Home Study Course or any accredited College or University
	6. Complete a bird or wildlife illustration course
	7. Volunteer to prepare bird “skins” for local Bay Area scientific collections (i.e. CAS, GGRO, UC Berkeley)
	8. Participate in Cornell’s Project Feeder Watch
	9. Participate in a Bird-a-thon
	10. Participate in the Great Backyard Bird Count
	11. Contribute Data for at least 12 field trips to eBird.com
	12. Volunteer or observe as a GGRO Hawk Watcher or other raptor count sight
	13. Volunteer at a bird banding station
	14. Participate in a bird conference or festival such as Central Valley Birding Symposium, Western Field Ornithologist Conference, Monterey Bay Birding Festival, San Francisco Bay Flyway Festival, etc.
	15. MB Program Participants may submit other field activities for approval
	16. Each of these activities count towards the MB Program participants volunteer hours requirements and are not mutually exclusive – one event could count for more than one Field Activity requirement
16. Bird at least ten of the following sites and complete a trip report for each:
	1. San Francisco
		1. SF Land’s End/Sutro Heights Park
		2. The Presidio National Park
		3. The Marin Headlands
		4. SF Mt. Davidson
		5. SF Glen Canyon
		6. SF Heron’s Head Park
		7. SF Candlestick Point State Park
		8. SF Golden Gate Park
	2. Marin County
		1. Point Reyes National Seashore
		2. The Marin Headlands
		3. Las Gallinas Water Treatment
		4. Muir Woods National Monument
		5. Bolinas Lagoon
		6. Mount Burdell Open Space Reserve
	3. Alameda County
		1. Mines Road / Lake Del Valle
		2. Coyote Hills Regional Park
		3. Don Edwards National Wildlife Refuge
		4. Hayward Shoreline Regional Park
		5. MLK Regional Shoreline
		6. Brushy Peak Regional Park
		7. Garin Regional Park
		8. Anthony Chabot Regional Park
	4. Contra Costa County:
		1. Sibley Volcanic Preserve
		2. Briones Regional Park
		3. Black Diamond Mines
		4. Carquinez Straits Regional Park
		5. Mt. Diablo State Park
		6. San Leandro Reservoir (EBMUD)
		7. Point Pinole Regional Park
		8. Tilden Regional Park
	5. San Mateo County:
		1. Fitzgerald Marine Preserve
		2. Sweeney Ridge
		3. Halfmoon Bay Blufftop Park
		4. Ano Nuevo State Park
		5. Edgewood County Park
	6. Santa Clara County:
		1. Arastadero Preserve
		2. Palo Alto Baylands Preserve
		3. Stevens Creek Reservoir Preserve
	7. Sacramento Central Valley refuges:
		1. Grasslands National Wildlife Refuge
		2. Sacramento National Wildlife Refuge
		3. Gray Lodge National Wildlife Refuge
		4. Colusa National Wildlife Refuge
		5. Cosumnes River Wildlife Refuge
	8. Sierra Nevada region:
		1. Yuba Pass / Sierra valley
	9. Lower Klamath Basin National Wildlife Refuge
	10. Panoche Valley
	11. Pinnacles National Monument
	12. Moss Landing Preserves
	13. Monterey Bay
	14. Pelagic trip – Monterrey Bay, Cordell Banks, or Farallon Islands
	15. Big Sur