

The Avocet

Volume XIV, Number 2

February, 1967

Monday, February 13
8:00 P.M.

Rosegarden Library
Dana and Naglee Avenues
San Jose

Mr. Claude A. Look
presents
the film
"GLEN CANYON"
and a discussion of
"The Sierra Club and the Internal Revenue Service"

Our member, Mr. Tony Look, Immediate Past Chairman of the Loma Prieta Chapter of the Sierra Club will tell us of the problems the Sierra Club has had with the IRS that resulted in the recent ruling rescinding the club's tax exempt status. He will also show the Sierra Club's beautiful color film "Glen Canyon", which describes a project similar to that planned for the Grand Canyon. It looks as though that fight is not over. Conservation is our business; come out and profit by what Mr. Look has to say.

An Interesting Meeting Planned

The Youth Science Institute of San Jose has tentatively scheduled a discussion that should be a fascinating affair. Hopefully, Mr. Norman B. Livermore, newly appointed Director of Natural Resources of the State of California will participate in a program with Mike McCloskey, Conservation Director of the Sierra Club, on February 8 in the Concert Hall of the Music Building, San Jose State College. Illness of one of the men has made final plans uncertain so watch your newspaper or phone Diane Conradson 941-2102 close to the scheduled date.

Coming Events at a Glance

Mon., Feb. 6	7:45 P.M.	Saratoga (Board)
Wed., Feb. 8	8:30 A.M.	San Jose
Sun., Feb. 12	9:00 A.M.	Lake Merced
Mon., Feb. 13	8:00 P.M.	San Jose (General Meeting)
Mon., Feb. 20	8:00 P.M.	San Jose (Screen Tour)
Tues., Feb. 21	4:00 P.M.	Palo Alto (Screen Tour)
Wed., Feb. 22	9:00 A.M.	Palo Alto Foothills
Sat., Feb. 25	9:00 A.M.	San Mateo Coast



February Calendar

Board Meeting

Monday, February 6 - 7:45 P.M. at the Cases'. MEMBERS
20537 Verde Vista Lane, Saratoga - 867-4748 ALWAYS WELCOME

General Meeting

Monday, February 13 - 8:00 P.M. San Jose (See first page)

Field Trips

Wednesday, February 8 - Oak Hill Cemetery, 300 Curtner Road, San Jose. 8:30 A.M. Fanny Zwaal, leader - 292-2060
Drive south on South First Street to Curtner Avenue on the right. Follow Curtner to first stop light. Turn left into mortuary parking lot.

Sunday, February 12, Lake Merced - Meet at 9:00 A.M. on Skyline Boulevard at the entrance to the lake.
Leader - Ralph Trullinger - 854-4201

Wednesday, February 22 to the foothills above Palo Alto - birding in field and woodland. Be prepared to hike. Bring lunch if you wish. Go west on Page Mill Road, turn right onto Arastradero Road (there is a grove of Eucalyptus trees on the left side of Arastradero). Continue for about 1/4 mile and turn left where the eucalypti end and a cypress hedge begins. Meet at 9:00 A.M. - Leader - Virginia Bothwell 854-6458

Saturday, February 25 - to the San Mateo Coast. Meet at Pigeon Point by the light house at 9:00 A.M. We will work north along the coast from there, looking for rock and surf birds, gulls and others. Bring lunch. Leaders - Joe Greenberg and his sons - Russ and Doug - 327-0329

Screen Tours

Monday, February 20, 8:00 P.M. Morris Daily Auditorium, San Jose State College, and
Tuesday, February 21, 4:00 P.M. - Palo Alto Senior High School Auditorium, El Camino Real and Embarcadero Road, Palo Alto.

Howard L. Orians

"The Land the Glaciers Forgot"

The setting ... Wisconsin, a fourth of which, strangely, the glaciers bypassed. Howard L. Orians of Madison, Wisconsin, combines fascinating geology with birds and animals in an unusual color film documentary. In their native habitat and in action: deer, beaver, bear, 'possum, porcupine, otter, fox, raccoon; many species of birds. Highlight: the Bird Bathing Beauty Contest ... warblers competing with scarlet tanagers delightful, colorful, amusing.

Progress Report: BCDC

The Bay Conservation and Development Commission has made its Progress Report to the Governor and Legislature of California. Twenty-three study reports have been, or will be, presented to the Commission and these will form guidelines for the preparation of a Plan for the Bay. The "plan" phase will commence this June.

Thirty permits have been processed after public hearings before the Commission. Five were denied, and of the 25 permitted only two were for solid fill in the Bay. One was to the City of San Leandro which has prepared a four mile shoreline plan including a wildlife sanctuary all of which will be open to the public and the other to U.S. Steel for ten acres in an industrial area of South San Francisco.

Mr. Melvin Lane, Chairman, in his report states "judging by the volume of mail we receive, by the extensive coverage of our activities by Bay area news media, and the large audiences at our meetings, we believe that public interest in the future of S. F. Bay continues to be great. We are making intensive efforts to inform the public as to the results of our studies, and to obtain public involvement in our work".

For those of you who might like to know who represents our area on the Commission, or whom you can contact locally for information or to express an opinion, they are as follows:

Supervisor Charles A. Quinn representing Santa Clara County. Mr. Quinn's proxy is George R. Kane, publisher of the Los Gatos Times.

Supervisor Charles St. Clair representing San Mateo County.

Councilman James P. Thurber, Jr., of Los Altos, appointed by ABAG.

Mr. Melvin Lane, Chairman of BCDC, of Lane Publishing Company, Menlo Park.

Members of the Advisory Committee who live or work locally and who represent many points of view are:

Henry Bostwick, Jr., Executive Vice-President and General manager of the San Mateo County Development Assn, Inc.

Eric E. Duckstad, Director of Regional and Urban Studies at Stanford Research Institute.

George O. Gates, Assistant Chief Geologist, U.S. Geological Survey, Menlo Park.

John P. Harville, Professor of Biology at San Jose State College.

Mr. Leslie E. Carbert, a former regular member, representing the State Planning Office, lives in Palo Alto.

(continued on page 10)

Progress Report: BCDC (continued)

Let us confirm Mr. Lane's belief that there is widespread public interest and let's get involved!

Progress Report: Palo Alto

At the City Council meeting on January 16, the Mayor was authorized unanimously to sign the contract with the architect for the Baylands Interpretive Center.

H.M.

INDIVIDUAL REPORTS

November (late) Snow, Canada, Ross and White-fronted Geese, Whistling Swans and Long-billed Marsh Wrens at Gray Lodge and the Sacramento Wildlife Refuge. (The above are relatively abundant in this area but nevertheless a thrill to see. E.H.)

December 11 - Three European Widgeons at the Los Banos Wildlife Refuge.

December (late)- Short-eared Owl and Red-throated Loon in bay area.

Bill MacKenzie and Dave Thompson

December 27,28 - Pigeon Hawk, Lake and Sonoma Counties

December 29 - White-throated Sparrow, Los Gatos (Still present January 8 at time of report)

December 30 - Barn Swallow, Santa Cruz

January 8 - Horned Grebe and Common Loon, Camden Ponds

E. H. McClintock

January 8 - Blue-winged and Green-winged with Cinnamon Teals, just east of the dike that parallels the airport runway, Palo Alto marshes.

N. Holmes, F. LaRiviere

Mrs. Evelyn Hester
Field Notes Editor
15015 Karl Avenue
Monte Sereno, California
356-3728

Counselors for the Blind Needed

San Francisco LIGHT HOUSE FOR THE BLIND is in need of counselors or instructors to teach plant life, animal life, etc. at its camps for blind childre and adults. Sessions (3 weeks each) start June 15. For information call the Executive Director, Wes Rich at HE1-1481.

New Members

We welcome:

Robert G. Clement
20297 Black Road
Los Gatos, Ca. 95030

Chris Crumal
2363 Craig Court
Mountain View, Ca. 94040

Stella Ford Walker
P.O. Box 872
Los Altos, Ca. 94022

Mr. Robert L. Zakhan
17960 Mt. Charley Road
Los Gatos, Ca. 95030

Caroline Davis, Membership Chairman

Citizen Action

In the final analysis all the effort and money which conservationists expend goes for nothing unless there is political action to implement such things as control of billboards, highway design, air and water pollution, creation and preservation of pen space, San Francisco Bay, the Palo Alto marshlands, etc. and etc.

To propose ideas, educate the Legislature as to some of these ideas, and to inform the public of what is going on an organization called Planning for Legislative Action was formed less than two years ago. It fills a critcal need - organization where the laws are made - in Sacramento. Their, (OUR), representative there can be thought of as a lobbyist or in terms mentioned above - an educator and liason man between the people who desire a decent total environment and our lawmakers. We do differ from other libbies in the sense that all of our ideas are for public, not private, benefit.

Donations to this organization are NOT tax-exempt, nor are donations to the Sierra Club at the present. The ugly head of "the power to tax is the power to destroy" seems to be visible again. Can every one who reads this send at least \$1.00 donation to Planning for Legislative Action, 2636 Ocean Avenue, San Francisco, Ca. 94132. This minimum donation will keep you informed of events in Sacramento.

Mr. John Zierold, 1414 Sutterville Road
Sacramento, Ca. 94822
represents PLA in Sacramento

H.M..

DON'T FILL THE BAY WITH NEWSPAPERS

Audubon member Mrs. Howard Crittenden is using "Don't fill the Bay with Newspapers" as her theme for a newspaper drive for the Holy Trinity Episcopal Church, Ravenswood and Laurel in Menlo Park. If you wish to aid her efforts, deliver your newspapers to the church between 9-1 on February 18 or 19.

SOME ECOLOGICAL ASPECTS OF SAN FRANCISCO BAY

By H. Thomas Harvey

This article is continued from the December issue of The Avocet and was prepared by H. Thomas Harvey for the Bay Conservation and Development Commission.

The consumptive recreational uses of the bay consist mainly of hunting and fishing. The fisheries involve a variety of human uses of the bay from the pleasant enjoyment of the sport by kids along the sloughs to sport fisheries with elaborate equipment and economical systems where hundreds of people depend on this natural resource for their livelihood.

The major sport fish is the striped bass of which about 3 million pounds are taken annually (Skinner, 1962). The most significant fact about this sport fishery is its availability to the vast public of the S.F. Bay Area. The short distance from home to sport is an unusual and outstanding attribute of our region.

The potential of oyster fisheries and clamming depends first on improvement of the water quality, particularly in the South San Francisco Bay, Barret (1963) indicated that "San Francisco Bay Area undoubtedly possesses the greatest potential of any area in the State for shellfish culture". And though oysters grow in S. F. Bay the South Bay is not open to oyster operations due to the public health quarantine (Barret, 1963).

The value of the bay to hunters is measurable in part by the number of hunting clubs around the bay which according to Scott (1963) in 1957 numbered 242 private duck clubs. And it is estimated by Skinner (1962) that expenditures on hunting are close to \$7,000,000 a year. Values perhaps even greater than those measured in hunt clubs or dollars spent are the psychological values, the challenge of the hunt, the cool breeze in the face, the lift to the human spirit that can come from hunting or fishing.

The values of natural areas of S. F. Bay are varied and difficult to assess. Whichever criteria are used to attempt such evaluations, however, should be based on ecological relationships. The interdependence of organisms and their environment is a two-way street.

Though an environmental factor, such as moisture, may limit an organism the organism may in turn modify the environment. For example, the coast redwood of California requires considerable moisture to grow well; it in turn causes fog drip to such an extent that the total precipitation in some areas is actually more than double the normal rainfall.

Therefore, if man modifies the bay ecosystem by changing the quantity of any part of the system it is likely that the change will have indirect effects on numerous organisms including man himself. It thus seems wise to consider some of the ecological aspects of San Francisco Bay in their natural setting.

ECOLOGICAL BASES OF THE NATURAL HABITATS OF S.F. BAY

Although all components of a natural system are tied together in an interrelated complex whole only certain aspects of the bay ecological system will be discussed here. The role of climate on the physical factors affecting the organisms in the bay will be only briefly mentioned as will the role of the various sediments. (Other BCDC reports will suggest the importance of tides, pollution and general geology to the structure and form of San Francisco Bay.) Each factor, however, does directly or indirectly influence the organisms found in the bay. A change in one factor such as the amount of domestic sewage dumped in the bay will produce both quantitative changes as to the abundance of organisms in a given area (Filice 1958) or qualitatively it may alter the composition of the fauna found under those conditions (Filice, 1959), for some animals have lower oxygen requirements than others or are more tolerant to toxic materials in the effluent.

For the sake of reducing the complexity of the bay ecosystem three habitats will be discussed somewhat independently, but always with the realization that each influences the other and all are products of, and subject to, the action of forces in the atmosphere and the substrate. They are the aquatic, mud flat and marsh habitats. Though the mud flats are generally considered part of an aquatic habitat they are presented here as unique because of their extensive nature and role in support of millions of birds of the Pacific Blyway. The aquatic habitat will be considered first, because of its great influence on the other habitats and its immense size.

The aquatic habitat.

San Francisco Bay as generally considered is in reality an estuary (drowned river mouth) and a lagoon (arm of the sea) the estuarine portion being essentially north and east of the Bay Bridge and the lagoon portion being the South Bay. Although there are estuaries in the South Bay where streams enter the lagoon they are of relatively minor importance. The flow of the San Joaquin-Sacramento River system at present pours relatively fresh water into the bay at fluctuating rates of from 3,342,000 acre feet during some winter months to 681,000 acre feet during late summer or fall (USDHEW, 1964). The northeastern segment of the bay exhibits many

of the variable attributes of a typical estuary. In addition to the seasonal fluctuation in water flow and thus a change in water quality there are the typical gradients of temperature, salinity and nutrients, see fig. 2. These gradients contribute to the gradient of kinds of organisms which are found there. For example strictly marine fish, rockfish and herring are found in the bay around Angel Island while fresh water forms such as bluegill are found in the Suisun Bay-San Joaquin River Area (Alplin 1965, 1963).

In addition to the more or less permanent residents of the estuarine habitat the anadromous fishes, such as salmon, migrate through the bay on their runs to spawning grounds in the fresh water rivers and streams of the San Joaquin-Sacramento River system. They require a positive flow in order to select the channels which lead to the major rivers and thus to the spawning grounds. A flow reversal periodically occurs in the San Joaquin River system due to water removal at the Tracy pumping plant. In 1961 and 1962 the San Joaquin salmon run suffered an unprecedented drop which may be explained by reversed flow and pollution of the migratory channels during the run (Ganassle, 1963).

In addition to the native species of fish, introduced forms play an important part in the food web of the bay. The striped bass is a notable example of a successful transplant which now supports sport fishing valued at about \$23,000,000 a year. Introduced in 1879, and then again in 1881, the original fish have produced so well that 1,000,000 to 2,000,000 are caught annually (Skinner 1964).

The shallow South Bay or lagoon shows great variation in temperature throughout the year and considerable fluctuation in salinity, see fig. 3. As might be expected with little water being added by stream flow the south bay is much like the central bay regarding salinity with the higher concentrations occurring in the fall before the winter rains. The most notable variation of a factor measured during the comprehensive bay study (USKHEW, 1963) was that of biological oxygen demand (BOD). During the fall of 1962 the oxygen demand was extremely high, over one hundred times that of winter and spring demands in the lower part of the South Bay. This was most probably due to the low runoff and the increased effluent load due to the cannery operations around the south end of the bay. Along with the reduced temperature, light and nitrate the increased BOD probably contributed to the lowest level of plankton which was noted in late summer and fall.

This article will be continued in the March issue of The Avocet

CONSERVATION NOTES

We find ourselves with the beginning of a new year, a new national Congress, and a new state Legislature, along with a lot of old, unresolved conservation issues, and we can be sure that there will be a lot of new ones during the course of the coming year. It may, therefore, be well to take a few minutes to consider what is to be our attitude and policy on these conservation measures.

I quote, with permission, an editorial which appeared in a recent issue of "The Sierra Club Bulletin":

"That the dam-building Bureau of Reclamation, the redwood loggers, and heedless highway engineers regard conservationists as incurably anti-everything is not surprising. What does surprise us is the readiness of some conservationists to accept the validity of this appraisal. Why must we always be "against"; why can't we ever be "for" something?

"Every conservation objective may be expressed in either positive or negative terms, and perhaps we too often emphasize the negative. We are apt to say that conservationists oppose the construction of dams in the Grand Canyon. This is natural, because the initiative came from would-be dambuilders and we reacted against it. But it is just as true to say that we are in favor of preserving the Canyon intact and in favor of enlarging the national park in order to give the entire Canyon protection.

"Do we oppose indiscriminate logging of virgin redwoods? Yes, we do. But we also favor the establishment of a redwood national park. Do we oppose Park Service and Forest Service plans for incompatible development in de facto wilderness? Yes - as part of a positive program to preserve the opportunity to enjoy a true wilderness experience. Do we oppose water and air pollution? We certainly do, but that's only to say that we support pollution abatement measures.

"The real negativists are those who hasten to exploit, denude, pollute, carve up and pave over the earth, careless of tomorrow, exhausting this planet's capacity to support man and his fellow creatures. The basic objective of conservation, on the other hand, is essentially positive; to maintain an environment in which man can live in peaceful coexistence with the nature that nurtured him."

It seems to me that the suggestion of the positive attitude, instead of the negative attitude of objecting to proposed actions, is one that each of us should keep in mind when discussing these conservation issues, and when writing letters stating our opinions. We may find that the positive approach will make us more effective.

Our Voice in Government: It may also be well, at this time, to consider how we are going to express our opinions, that Organizations like the National Audubon Society and its branches/enjoy special privileges of tax exemption, may not advocate or oppose legislation to any substantial extent.

Individual citizens of a democracy, however, enjoy the right and share the responsibility of participating in the legislative process. One of the ways citizens may do this is by keeping in touch, as private citizens, with their representatives in the legislature; by writing, telegraphing or telephoning their views; by visiting and talking with their representatives when they can. Every American has two senators and one congressman with whom he may keep contact in this manner. The same applies to our State Senators and Assemblymen; we should keep in contact with them and keep them informed of our wishes - expressed in the "positive" manner, rather than as an "objection" to a proposed action.

A Santa Clara County Wilderness Area? Conservationists waged a long and determined struggle to achieve the passing of a National Wilderness Bill. Now, right here in our own county, and in a political climate much more favorable, we have the opportunity to act in support of the establishment of a wilderness area! Federal funds are available, and the County Supervisors, while not making any committing statements, do not seem to be opposed to converting certain areas, now under the Bureau of Land Management, into public recreation areas, including a large area to be set aside as a Wilderness Area, with the specified restrictions pertaining thereto.

Careful reading of local newspapers, followed by expressions of opinion to the County Supervisors, may be effective in achieving a worthwhile goal.

L. N. Case

With sadness we note the death of Angelina S. ow on January 13, 1967 in Los Gatos. The Society has profited for twenty years from her devoted service. She was Membership Chairman for fifteen years, lead field trips, and acted as a bird count leader, and has been greatly missed by her friends during her illness.