



The Santa Cruz Bird Club Discovers A Marbled Murrelet Nest!



by David Suddjian

Steve Singer thought I was overly optimistic when I advertised the Bird Club's May 5 field trip "to find a Marbled Murrelet nest" in Big Basin Redwoods State Park, but wouldn't you know it, that's exactly what happened! Our observations that morning led to the discovery of an active nest, the first ever found in a coast redwood, and only the fourth nest ever found in California (all four have been in Big Basin). We were also fortunate to be the first to actually see a Marbled Murrelet fledge, almost two months after our first lead in early May.

The discovery actually began with Steve and Stephanie Singer's preparatory trips to "stake-out" likely nest trees prior to our May 5 field trip. The Singers have been studying the murrelets of Big Basin for several years, and were involved with the discovery of two nests in the park in 1989. Along with colleagues, they had developed a "ground search" technique for locating nests of the secretive murrelet. The first step is to identify trees with suitable nest branches. In Big Basin such trees are old growth coast redwoods and Douglas Firs, with the large branches needed for the nest site. Nest branches are typically greater than 12 inches in diameter, have significant cover provided by adjacent foliage, and offer at least one clear landing and take-off route for the adults (and chick). Once a likely tree is selected, an observer stations his/herself in view of the suitable nest branch before dawn, in hopes of seeing murrelets flying into or out of the tree. Such observations may lead to discovery of a nest (as they did for us this year).

On the morning of May 5 fourteen bleary-eyed folks convened at Park Headquarters before 5:00 a.m.. Following some brief instructions we split up into groups and made our way to our respective stake out trees. The morning flight of murrelets began as usual, with detections of calling birds. The pace of activity increased, and soon we were also seeing murrelet torpedoes winging across the sky and

through the tree tops. I was stationed with three others on the northwest side of the tree where our nest would be found, and although we saw and heard many murrelets, we had no hints at the location of any nests. But on the *other* side of the same tree Rebecca Cull and Bonnie Bedzin made the observation that led to our discovery. Rebecca and Bonnie had seen a pair of murrelets enter into the crown of the tree, flying up into the foliage from a fairly low height. After a while, one bird was observed flying out.

We weren't sure what this observation meant, other than that some follow-up visits were certainly in order. Seeing a pair fly into the tree was interesting, as during incubation each adult stays on the nest for 24 hours, trading with the other in the half-hour before dawn. The dawn "exchange" is characteristic of this phase of the nesting cycle, with one bird flying to the nest and the other flying out only seconds later. After hatching, the chick is left unattended at the nest most of the time (except for the first few days when it may be brooded by an adult). During this period both adults visit the nest one or more times each day (mostly near dawn and dusk) to bring fish for the chick. It turns out the May 5 observation was probably made just as the birds were selecting their nest site.

On May 7 Bryan Mori, my wife Susan and I were back beneath *the* tree, hoping to figure out what was going on high above the forest floor. That morning we saw one murrelet fly into the tree, and didn't see any fly out. Subsequent observations by the Singers confirmed that murrelets were entering and exiting the "nest tree" before dawn, in the pattern expected for a dawn exchange at an active nest. It would still be some time before we actually saw the nest site or observed evidence that conclusively confirmed the nesting.

We decided to keep word of our find among ourselves, telling only a few

others who might be able to help with the observations. We felt it was important to keep the nest secret to prevent disturbance of the nesting birds, and to avoid attracting attention of predators (such as ravens and jays). In this interest, we decided not to have the nest tree climbed while the nest was active, and we made our observations from unobtrusive viewing stations.

With our first observations of the dawn exchange we were able to identify the portion of the tree the birds were flying into and out of, but location the nest branch and nest site were difficult. The time available to watch the bird fly to the nest during the incubation phase was literally only one or two seconds each morning, and pre-dawn light levels in ancient forests are not exactly optimal for viewing birds landing on branches high overhead. We were able to narrow the location of the nest down to a group of branches about 130-140 feet high, on the north side of the tree.

After about four weeks of observing the dawn exchange, something different happened on June 8. That morning Stephanie Singer observed three "exchanges" - one just before dawn, and two shortly afterward. Unsure of what was going on in the unseen nest overhead, the timing of events told us the chick may have hatched, and the multiple "exchanges" may have been feeding visits. In fact, our subsequent observations indicate the chick did hatch around June 8. Observations of feeding visits were made on several other mornings, then finally, on June 19, Mark Allaback witnessed one of the adults carrying a fish into our tree, providing conclusive evidence of the active nest!

Our next big event occurred on June 24. I was observing the dawn feeding visits with the Singers. During the second visit of the morning, after one of the adults had flown to the nest, I moved to a new viewing spot. From this location I could see the suspected nest branches. In a few

minutes I saw the adult "pop up" into view on a branch just as it launched into flight and flew overhead with whirring wings! At last, we knew which branch the adult was on, and although we couldn't see the nest, we knew it was probably on the same branch, near where the adult was seen. Sure enough, Steve, Clay Kempf and Bud Getty saw the chick being fed by an adult on June 28, but still the nest itself could not be seen from our viewing points. Our efforts were building to a climax now, and we were all becoming exhausted with the experience.

On June 29 we watched the nest continuously from before dawn to dusk. The adults were seen flying in at dawn, and the chick was seen several times through the day. Its body was downy, but its wings were mostly free of down and it flapped for extended periods. That morning the adult was photographed on the nest branch with a fish in its bill. That evening, we wondered if there might not be a view of the nest from somewhere around the tree. I went searching, and there it was: a view of the chick's downy head over the brow of the huge nest branch; even the egg tooth was visible! I quickly brought Steve and Stephanie over. It was near sunset, and a patch of sunlight, the last of the day, was drifting across the nest site. Even when we knew where to look, the chick was very hard to spot. The best view was through a tiny window of foreground leaves, looking up to the 135 foot high branch, over 150 feet away!

We knew the fledging would occur soon. The nest was now watched each morning and evening, and we called in Rod Norden and Mike Danzenbaker to photograph the chick. We knew when to expect the chick to fledge based on the amount of down remaining. Still, a measure of uncertainty existed, and we couldn't be sure just when the chick might leave. Thus, we were dismayed on the morning of July 3 when no feeding visits were observed, and the chick could not be seen on the branch! Did we miss the fledging? It turned out the chick was simply hunkered down on the nest, out of view. But no feeding had occurred, and we felt fledging was imminent. That evening nine of us were present, stationed all around the tree. The sky was clear, and it had been a warm day. The evening murrelet flight began around

The Marbled Murrelet Gets Some Respect

Many Albatross readers are familiar with the mysterious Marbled Murrelet, and the plight of its declining populations. This small seabird feeds in inshore ocean waters, and is unique among alcids for nesting in trees. In the southern portion of its range (south of Southeast Alaska) the Marbled Murrelet is dependent on ancient forest habitat for breeding. Its population has crashed due to logging, and it is also threatened by oil spills, gill netting, and forest fires. The Santa Cruz Mountains have the southernmost breeding sites, primarily (only?) in protected State and County parks.

Long without any legal protection, our wildlife resource agencies are beginning to show the murrelet some well-deserved respect. The U.S. Fish and Wildlife Service listed the Marbled Murrelet as a Proposed Threatened species in June,

and the California Department of Fish and Game listed the murrelet as Endangered in August. Following a review period the federal status will hopefully be formally assigned to Threatened. These listings are important, as they provide the legal backbone to protect this species' habitat and population. But they are already running into political conflict with the logging industry. We hope the misguided calls from industry officials for a "balanced" approach to murrelet conservation won't sway (and delay) the development and implementation of recovery plans (as they did for the Spotted Owl). It seems strange to hear about a "balanced" approach from the same people who threw the viability of our ancient forests out of balance with unsustainable logging practices and greed.



8:25 p.m., with a number of calling birds and a few visual observations. Just after sunset, when it was almost too dark for us to see, we witnessed as the chick jumped from its nest, to make its first flight which must carry it to the ocean some five miles away! We were the first to see a Marbled Murrelet chick fledge first hand, and the first to record the events at the nest just prior to fledging. We were ecstatic and jubilant. Imagine how the chick felt!

After we determined that the birds were finished with the nest for the season, a professional tree climber scaled the nest tree to photograph the nest and document the nest site. The nest was 135 feet high in a 260 foot tall tree. The nest branch was an

enormous limb, 24 inches in diameter at the trunk! Funds provided by the Santa Cruz Bird Club, Sempervirens Fund, and The Habitat Restoration Group, and the cooperation of the California Department of Parks and Recreation and the California Department of Fish and Game, made this documentation possible.

The discovery of this nest and watching its progress were unforgettable for us all. We are presently analyzing the data collected and plan to present our findings to the Pacific Seabird Group at its annual meeting in Charleston, Oregon, this winter.