

## SILKY FLYCATCHERS — FAMILY PTILOGONATIDAE

### Phainopepla *Phainopepla nitens*

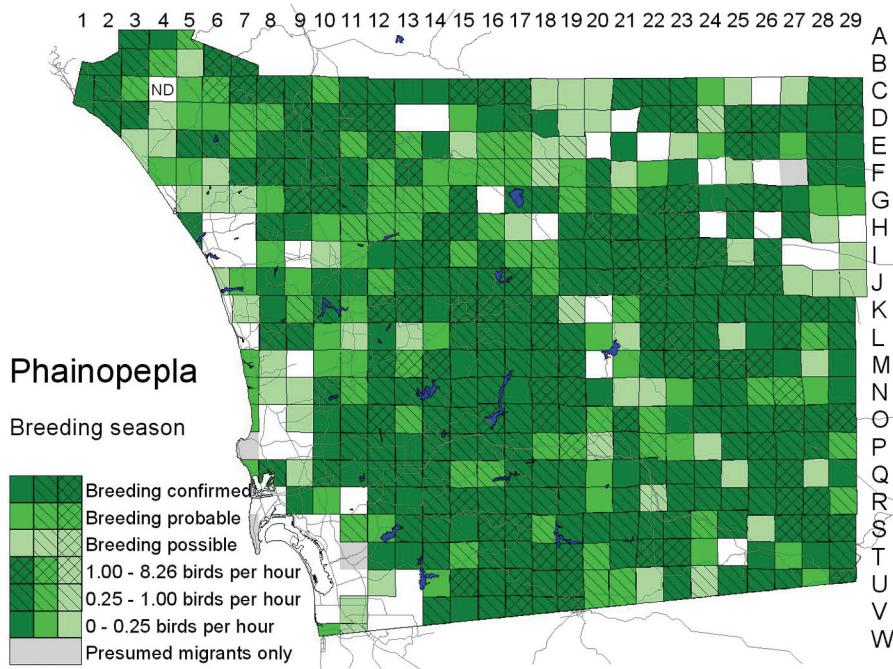
The Phainopepla's biology is unusual in many ways. The birds feed predominantly on berries, especially those of mistletoe, and they are a primary vector for that plant's dispersal. They are common, locally abundant, in the Anza-Borrego Desert most of the year but largely vacate it in summer. On the coastal slope they are common in oak and riparian woodland and open chaparral from late spring through summer, uncommon in winter. It seems likely that many Phainopeplas nest in both regions in the same year, but this has still not been proven.

**Breeding distribution:** The Phainopepla is most abundant on the desert slopes of San Diego County's mountains and at oases along their bases, where thickets of mesquite and catclaw are heavily laden with mistletoe (up to 60 at Agua Caliente Springs, M26, 13 April 1998, E. C. Hall; 100 at Vallecito, M25, 27 April 1998, M. C. Jorgensen). Away from these thickets, however, the species is less common, even absent on valley floors and in badlands where mistletoe and the plants it parasitizes are absent. Though the Phainopepla is scarce to absent in



Photo by Anthony Mercieca

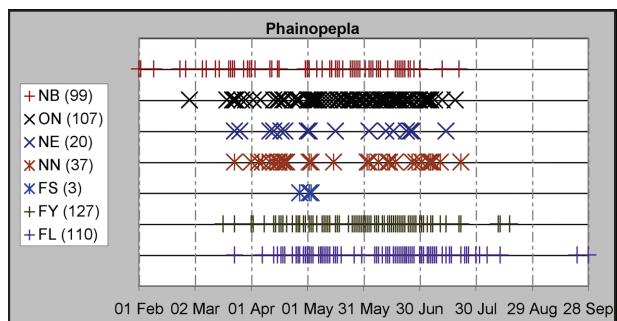
coniferous woodland, it breeds essentially continuously from the desert over the mountain crest onto the coastal slope. In this region, the Phainopepla is a common summer visitor in the inland valleys and foothills, with up to 53 at Oak Grove (C16) 23 June 2001 (K. L. Weaver) and 40 on the north slope of Otay Mountain (U15) 14 June 2001 (A. P. and T. E. Keenan). Within 10 miles of the coast the



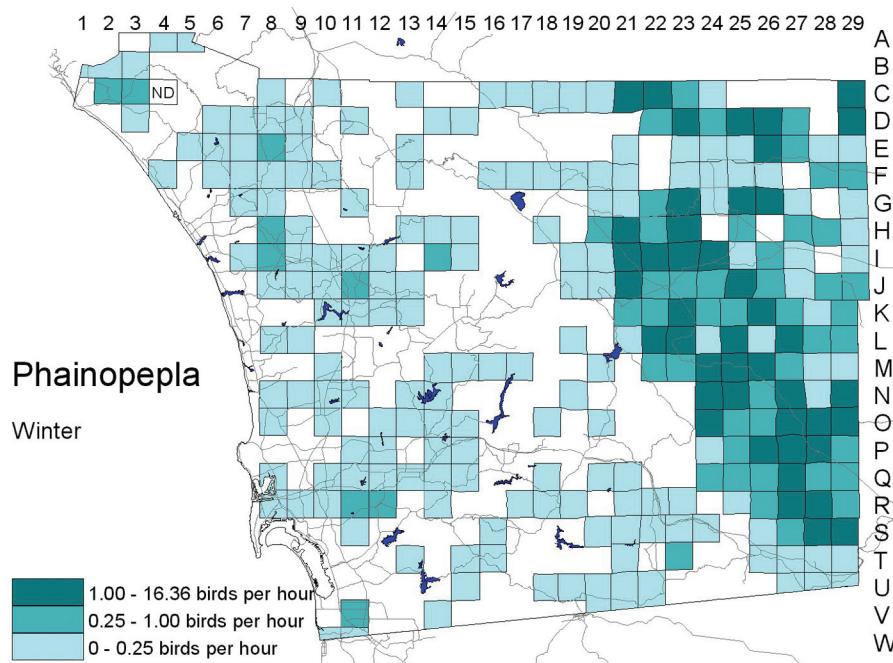
Phainopepla is much scarcer than farther inland, though some breed along the coast, with up to six, including adults feeding juveniles, at San Onofre (C1) 15 June 2000 (M. Lesinsky) and eight, including fledglings, in Tecolote Canyon (Q8) 26 June 1998 (E. Wallace). Though the birds favor the mistletoes that infest oaks, sycamores, and cottonwoods as well as mesquites and catclaws, they also feed heavily on the berries of other plants, especially blue elderberry, redberry, and desert thorn or wolfberry.

**Nesting:** In the Phainopepla, unlike most songbirds, the male does most of the nest building. The shallow cup nest is small for the size of the bird. The choice of nest site is unspecialized; we noted nests from 4 to over 60

feet from the ground, sometimes in plants that offer edible berries, sometimes not. In the Anza-Borrego Desert, we found nests in palo verde, mesquite, catclaw, lotebush, desert willow, Mojave yucca, agave (dry flower stalk), ocotillo, and snake cholla. On the coastal slope, nest sites included both native trees and shrubs like California sycamore, willow, coast live and Engelmann oak, elderberry, laurel sumac, mission manzanita, and chamise (even dead and leafless) and exotic species like eucalyptus, Peruvian pepper, pine, olive, black locust, myoporum, and giant reed. Chu and Walsberg (1999) reported that Phainopepla nests are heavily shaded by vegetation, but we found some completely exposed to the sun.



The Phainopepla's breeding season varies much with locality. In the low desert, Phainopeplas lay as early as late February, mainly from mid March through mid April. At higher elevations, along the desert edge, they continue to early June. In the coastal lowland, most begin laying in late April, some in mid April, and a few possibly as early as early April (pair courting and nest building northeast of Oceanside, F7, 31 March 2001, P. A. Ginsburg). Even at the higher elevations most Phainopeplas apparently complete their clutches by the end of June, but a few nest later, as seen by nest building as late as 21 July 2001 northeast of Santa Ysabel (I19; D. W. Au) and a pair with four fledglings in Spring Valley (R12) 22–28 September 1997 (M. and D. Hastings).



**Migration:** The Phainopepla's movements are among the most

complex and poorly understood of any North American bird. Three hypotheses remain to be tested: (1) that individuals breeding in the desert in early spring move to the coastal slope and breed again; (2) that the desert and coastal populations are distinct, each moving and breeding on its own schedule; (3) that the birds breeding on the coastal slope had attempted nesting in the desert but failed (Chu and Walsberg 1999). Evidence against the second hypothesis is the lack of a distinct break among the Phainopepla's habitats in San Diego County. The peak of breeding in each zone overlaps that in the neighboring zones, so most likely the birds move and breed facultatively as stimulated by multiple cues. They may remain sedentary if conditions permit.

In the low desert, the Phainopepla returns in September and departs largely in May. Late records for dry habitats are of two in Carrizo Canyon (Q27) 8 June 1997 (D. Julian) and six on Mescal Bajada (J25) 12 June 1998 (M. and B. McIntosh). At oases some birds are seen through June. Between 4 July and 15 September the only low-desert record is of one at Bow Willow (P27) 6 August 1972 (P. D. Jorgensen). At higher elevations, above about 2500 feet but still on the desert slope, as in Culp Valley (G23/H23), Phainopeplas remain in small numbers through the summer, though they are far more common in spring (M. L. Gabel in Massey 1998).

On the coastal slope, exact spring arrival dates are impossible to determine because of the number of wintering birds. Crouch (1943) reported arrival 15 April 1935. From 1997 to 2001, our first counts on the coastal slope of more than five individuals per day were on 19 April in both 1997 and 1999. On the coastal slope, there is no seasonal gap in March as I suggested previously (Unitt 1984); from 1997 to 2001 atlas observers accumulated 70 records of the Phainopepla on the coastal slope from 1 March through 14 April. Individual Phainopeplas or small flocks may be seen moving through atypical habitat through much of the year.

**Winter:** The Phainopepla's distribution on the desert side of San Diego County in winter is much the same as

in early spring. Daily counts at sites thick with mistletoe range as high as 125 at Vallecito 14 January 2000 (M. C. Jorgensen) and 122 on the southwest-facing slope of San Felipe Valley (H21) 17 December 2001 (W. E. Haas). On the coastal slope we found the Phainopepla to be surprisingly widespread in winter, both in the lowland (up to 15 between Bonsall and Fallbrook, E8, 3 and 29 December 2000, P. A. Ginsburg; 15 in the Tijuana River valley, W11, 19 December 1998, G. McCaskie) and in the foothills (up to 12 near La Posta Microwave Station, T23, 3 February 2001, J. S. Larson; eight northeast of Lake Henshaw, F18, 29 December 1997, G. L. Rogers). Phainopeplas occur in winter occasionally as high as 4600 feet at Lake Cuyamaca (M20; three on 22 February 1999, A. P. and T. E. Keenan) and 4900 feet at San Ignacio, Los Coyotes Indian Reservation (E21; up to two on 28 December 1999, P. D. Jorgensen).

**Conservation:** The Phainopepla has so far been little affected by man-made changes to the San Diego County environment, and no trend in the species' numbers is evident here. Possible threats in the Anza-Borrego Desert are declining water tables, which kill mistletoe-supporting trees and shrubs, the proliferation of the exotic saltcedar, which does not host mistletoe and displaces native vegetation, and climate change leading to longer droughts. During the dry years from 1999 through 2002, we witnessed the death of many clumps of mistletoe, constricting the Phainopepla's habitat into oases. On the coastal slope, the Phainopepla has been somewhat insulated from urbanization by its more inland distribution, and small numbers breed in developed areas. An invasive exotic plant that Phainopeplas do use is the Peruvian pepper tree, but the value of this tree's berries in comparison to that of the Phainopepla's natural foods is unknown.

**Taxonomy:** Two subspecies of the Phainopepla are generally recognized, differing in size. The smaller *P. n. lepida* van Tyne, 1925, occupies the northwestern part of the species' range, including California.