

SACRAMENTO COUNTY BREEDING BIRD ATLAS

Version 2.0

GUIDELINES FOR USE OF BREEDING CODES

This document consists of three sections:

Section One is a general guide on how to use breeding codes in your eBird lists and includes the various codes and their meanings.

Section Two includes accounts of all the species which may breed in Sacramento County with IMPORTANT information about the use of codes for each species, when and where you might expect to find them, and behaviors to use to determine breeding status.

Section Three is a table showing the expected range of breeding dates for all the species that might breed in the county. Some of these species may exhibit breeding behavior outside this range of dates, however, use of codes that suggest POSSIBLE or PROBABLE breeding should generally NOT be used outside this range of dates. Information in **Section Two** will help guide you about use of these codes for a given species.

SECTION ONE:

The intent of a Breeding Bird Atlas (BBA) is to determine the breeding status of all bird species within each of the (5km square) blocks in a given county or state. This is commonly done by assigning specific blocks to specific persons and asking them to focus on those blocks. The advent of eBird, and its incorporation of BBA Breeding Codes (shown on the following pages), allows us to do this BBA in a different fashion. We are inviting anyone who birds the county to note any breeding behaviors they observe by selecting the appropriate code (found under the “add details” tab as you enter your eBird list online or on your phone app). We will collect all the data quarterly, vet it as necessary, and add it to our BBA database. As we add data for each species, we will make maps available on the Central Valley Bird Club web site so you can see how the BBA is progressing.

Sacramento County BBA History: In the late 1980s and early 1990s Tim Manolis led a Sacramento County BBA project. We have access to all those data (not yet published). Therefore, with this new BBA we have the opportunity to compare breeding distributions of birds to see how they have changed with land use conversions in the past 25-30 years. Once we have adequate data from the new BBA, this will all be published in the Central Valley Bird Club Bulletin.

CAUTION: Getting your observations into the correct BBA block. The data you contribute will be most useful if you are careful to choose a location for your eBird list that is in the block where you made the observations. This can be tricky in some places for traveling counts. Using the Google Earth and/or Google Maps links we provide on the CVBC web site will help. In general, for traveling lists, you should keep your distance less than 5 km (3 miles). We may simply choose to not use data from any checklists with distances longer than this. If you do a fairly long distance count, but are certain you stayed within ONE BBA block, please put this in the comment section so we know. The good news is that many of the most popular hotspots in the county are contained well within a single block. For example, all the hotspots associated with

Cosumnes River Preserve are included in a single block so choosing any of them will keep your observations in the correct block.

CAUTION: Use the codes (esp. those that indicate POSSIBLE or PROBABLE breeding) appropriately.

Examples:

- Birds NOT on our List: You may well hear species such as Ruby-crowned Kinglets or Golden-crowned Sparrows singing in Sacramento County in March or April. Those species DO NOT breed in the county so do not use the code S (singing male – POSSIBLE). Same goes for any species you do not find on our full list of potential breeders. Of course, if you do observe unequivocal confirmatory breeding behavior from a species, do record that and please contact Ed Pandolfino (erpfromca@aol.com) or Chris Conard (conardc@gmail.com) right away.

- Birds which may breed in the county but are greatly outnumbered by migrating individuals that will NOT stay to breed here: The species accounts in **Section Two** will help with this. For example, Yellow Warblers or Black-headed Grosbeaks in April or May or even early June are more likely migrants headed uphill to breed. Therefore, any use of POSSIBLE or PROBABLE codes is inappropriate such species.

- Birds which breed in the county but breeders are greatly outnumbered by wintering birds: Many examples here, including species such as Red-tailed Hawks, Double-crested Cormorants, Western Meadowlarks, and more. The info in **Section Two** will guide you on best use of codes for these species.

In any case, don't be intimidated by these cautions as we will review all the data collected and deal with codes which seem to be applied inappropriately.

BREEDING CODES

NY Confirmed--Nest with Young -- Nest with young seen or heard.

NE Confirmed--Nest with Eggs -- Nest with eggs.

ON Confirmed--Occupied Nest -- Occupied nest presumed by parent entering and remaining, exchanging incubation duties, etc.

FL Confirmed--Recently Fledged young -- Recently fledged or downy young observed while still dependent upon adults.

FY Confirmed--Feeding Young -- Adult feeding young that have left the nest, but are not yet flying and independent (should not be used with raptors, terns, and other species that may move many miles from the nest site; often supersedes FL).

FS Confirmed--Carrying Fecal Sac -- Adult carrying fecal sac.

CF Confirmed--Carrying Food -- Adult carrying food for young (should not be used for corvids, raptors, terns, and certain other species that regularly carry food for courtship or other purposes).

UN Confirmed--Used Nest (enter 0 if no birds seen) -- Nest is present, but not active. Use only if you are certain of the species that built the nest.

DD Confirmed--Distraction Display -- Distraction display, including feigning injury.

PE Probable--Brood Patch and Physiological Evidence -- Physiological evidence of nesting, usually a brood patch. This will be used only very rarely.

NB Confirmed/Probable--Nest Building -- Nest building at apparent nest site (should not be used for certain wrens, and other species that build dummy nests).

CN Confirmed/Probable--Carrying Nesting Material -- Adult carrying nesting material; nest site not seen.

T Probable--Territory held for 7+ days -- Territorial behavior or singing male present at the same location 7+ days apart.

C Probable--Courtship, Display or Copulation -- Courtship or copulation observed, including displays and courtship feeding.

N Probable--Visiting probable Nest site -- Visiting repeatedly probable nest site (primarily hole nesters).

A Probable--Agitated behavior -- Agitated behavior or anxiety calls from an adult. This excludes responses elicited by "pishing", playing recordings, or mobbing behavior that species engage in year-round (for instance, mobbing an owl).

P Probable--Pair in suitable habitat -- Pair observed in suitable breeding habitat within breeding season.

M Probable--Multiple (7+) singing males -- At least 7 singing males present in suitable nesting habitat during breeding season.

S7 Probable--Singing Male Present 7+ Days -- Use only if you have observed a singing male at the exact spot (same tree or shrub) one week or more earlier in the season. Do not use if you have observed a singing male a week earlier *elsewhere* on the same transect covered by your checklists.

S Possible--Singing male -- Singing male present in suitable nesting habitat during its breeding season.

H Possible--In appropriate habitat -- Adult in suitable nesting habitat during its breeding season.

SECTION TWO:

SPECIES ACCOUNTS: GUIDELINES FOR ESTABLISHING BREEDING STATUS

- Written by Tim Manolis for the original Sacramento County Breeding Bird Atlas. Modified by Ed Pandolfino (mainly updating nomenclature, taxonomy, status, and distribution, where appropriate).

CANADA GOOSE – Should be a “slam dunk” to confirm with dependent goslings easily observed. POSSIBLE and PROBABLE categories should be avoided until late April when overwintering subspecies (“real” Canada Geese) have left.

MUTE SWAN – While not yet officially considered established in California, they are breeding regularly in many parts of the state. Confirm with observations of flightless young, but beware of captive birds. They have bred at Mather Lake and large numbers of feral birds found at the pond at Rancho Seco and elsewhere.

WOOD DUCK – Wintering birds (nonresidents) leave wintering sites by end of March; pairs may be searching in riparian woods for nests sites (cavities in trees, nest boxes) by March or even late February. Nesting occurs from March to July. Ducklings "parachute" from nest cavities, walk to water, where they may be found as early as mid-April (usually May-June). One of very few ducks to double brood.

GADWALL – A widespread breeder in the CV and breeds annually at the Bufferlands. Avoid categorizing as POSSIBLE or PROBABLE until after April as wintering birds are still present.

MALLARD – Wintering birds as well as residents may court and mate in winter and spring, so avoid use of POSSIBLE and PROBABLE categories until May. Breeding is usually easy to confirm by observation of females with fuzzy ducklings (rarely in late March, usually from April-June) which swim long before they fly (This applies to other duck species as well). Domestic mallards and hybrids are frequent breeders on farm ponds, city parks, etc. Use plumage and behavioral cues to distinguish domestic from wild birds.

CINNAMON TEAL – Begin arriving in the area January and February, but birds seen January-March may be migrants, and should not be given PROBABLE status even if paired, courting, or mating. Eggs laid April-June, with downy young appearing from mid-April (rare) to July (usually May-June).

NORTHERN SHOVELER – A widespread breeder in the CV and may possibly breed in the county. Avoid categorizing as POSSIBLE or PROBABLE until after April as wintering birds are still present.

REDHEAD – Bred historically in the CV but I am unaware of any recent confirmed CV breeding. Avoid categorizing as POSSIBLE or PROBABLE until after April.

HOODED MERGANSER – Has become a regular CV breeder in recent decades, almost exclusively using Wood Duck boxes. Note that both Hoodies and Wood Duck will lay eggs in each other's nests and mixed broods have been observed locally. Eggs can be distinguished from Wood Duck eggs by much more pointed shape. Avoid categorizing as POSSIBLE or PROBABLE until after April.

COMMON MERGANSER – Breeds in boxes and likely also in tree cavities along the American River. Avoid categorizing as POSSIBLE or PROBABLE until after April.

RUDDY DUCK – A very common wintering species with some remaining through summer and, rarely, nesting. Avoid categorizing as POSSIBLE or PROBABLE until after April. Watch for broods of ducklings from late May-August.

CALIFORNIA QUAIL – Best proof of nesting is observation of small young with adults (from May through September, rarely as early as late March).

RING-NECKED PHEASANT – An introduced species in rapid decline throughout its North American range. Cocks crow conspicuously mid-March through May. Ground nests hard to find; best proof of nesting is observation of female with chicks, May-August.

WILD TURKEY – Since introduction of birds from Texas in 1985, has become abundant and widespread. Adults with chicks seen April through August.

PIED-BILLED GREBE – Should not be given POSSIBLE status unless observed on more than one occasion in suitable habitat (marshes and marsh-bordered bodies of water) in the period May-July. Nest sites (floating mass of marsh plant material) may be conspicuous, but perhaps most easily obtained proof of breeding is observation of small chicks (easily recognized by striking black and white head pattern with red bill) swimming with or being carried on the backs of adults. Chicks may be off nests by late April and chicks have been seen in the county as late as September. CAUTION: wintering birds may perform courtship displays in spring before departing for northern breeding grounds.

WESTERN/CLARK'S GREBE – Has bred elsewhere in the CV and possibly in the county (Folsom Lake?). Courtship displays occur among wintering birds so avoid using POSSIBLE or PROBABLE until at least May.

ROCK PIGEON – Introduced species; separate feral birds from homing pigeons and other pet pigeons with great care; avoid use of POSSIBLE codes (depend mainly on CONFIRMED proof of breeding). Wild birds nest in niches in buildings, bridges, other structures, and in cliff faces and caves. In our area the species may breed at any time of the year.

EURASIAN COLLARED-DOVE – As for Rock Pigeon, introduced species which may breed year-round. Look for the male's "bowing display" to female (see BNA account for details).

MOURNING DOVE – Courtship flights and song are conspicuous evidence of PROBABLE breeding. Extended breeding season, raising 2-3 broods/year. Begin nesting in March, with

fledglings (recognized by shorter tails and scaly upper parts) appearing by second week of April (and as late as September, from later broods).

YELLOW-BILLED CUCKOO – Extirpated from the county as a breeder but who knows... Some areas of Cosumnes Preserve or Orr Ranch may have potential. Any calling bird in June or July should be considered a POSSIBLE breeder. Unmated birds give the "kowlp" call (a series of cooing notes) rather persistently, often while carrying a large insect (to attract a mate!). Three GOLD STARS for anyone who can confirm breeding!

LESSER NIGHTHAWK – Has nested in foothill grasslands in eastern part of county and birds have been seen in breeding season off and on along Meiss Road; eggs found in mid- May, fledglings noted in mid-June. Nest on bare ground in arid areas, sand and gravel beds of rivers, streams. Some gravel bar habitats along the American River (e.g. near Ancil Hoffman) look like they have potential.

WHITE-THROATED SWIFT – Usually cliff-dwellers, in our area found roosting/nesting under large bridges and freeway over- passes in vertical drain holes. Watch for birds entering such sites May-July (mating and courtship observable near nest sites April-May; fledglings appearing June-August). Avoid use of POSSIBLE or PROBABLE before May as many birds over-winter.

BLACK-CHINNED HUMMINGBIRD – Arrives in area in April. Locally common, nesting in riparian and oak woods, residential areas; usually near water. Double-brooded; first eggs typically laid in May, young on nests into June, fledging into July. Second broods in June-August.

ANNA'S HUMMINGBIRD – Most common local hummingbird, year-round resident, and one of the earliest nesters locally. First nests built in January and February, first fledglings off nests by March. Second nestings in April-May; possible third nesting attempts observed later in summer.

HUMMINGBIRDS IN GENERAL – Hummingbirds present many difficulties to the atlaser. Males of migratory species give courtship displays even during migration (and occasionally court females of other species). Spring migration of some species (RUFIOUS/ ALLEN'S) occurs during the breeding seasons of ANNA'S. "Fall" southward migration of ALLEN'S begins in late June, with RUFIOUS HUMMINGBIRDS appearing in July, at a time when ANNA'S and BLACK-CHINNED are still nesting locally. The male-female bond is very brief in hummingbirds (essentially confined to courtship and mating), females may mate with more than one male in a season, and males have nothing to do with nesting or raising young. Indeed, the atlaser cannot safely assume that the displaying males (of any species) in an area must be the mates of the females nesting there! Difficult to CONFIRM unless you find a nest. Watch females foraging for insects (or collecting spider webs for nest) very closely during breeding period.

NOTE for HUMMERS: Great CAUTION must be taken in dealing with suspected nesting by species other than ANNA'S and BLACK-CHINNED (ALLEN'S, COSTA'S and CALLIOPE are all REMOTE possibilities).

VIRGINIA RAIL, SORA – Use caution in assigning status based on calls. Much more common in winter; birds encountered in the period May-July are POSSIBLE breeders; note, however, that the rare local encounters with chicks have been in April (may be double-brooded). Nesting habitats of these two species overlap, Virginia Rails preferring slightly drier parts of marshes on average; but empty nests indistinguishable. (CAUTION: small chicks of these species are all black, frequently misidentified as "BLACK RAILS").

COMMON MOORHEN – Nest in dense marsh vegetation. Best evidence of nesting is observation of small young with adults, April-July. (CAUTION: small young similar to American Coot chicks, so take careful note of parental associations.)

AMERICAN COOT – Nest a large floating platform of marsh plant material (CAUTION: similar platforms built for roosting, etc.). Much more abundant and widespread in winter; avoid use of POSSIBLE codes until May. May be found incubating from March-July; adults with young seen from April through August.

BLACK-NECKED STILT – Nest a depression, usually lined with plant material, on marshy ground (may use drier nest sites more typical of AMERICAN AVOCET}. Form small colonies in marshes, rice fields. Nests with eggs found May-July (rarely in April, August); Dependent young seen May-August. Adults very vocal, actively attempting to distract intruders near nests.

AMERICAN AVOCET – Similar in nesting habits to BLACK-NECKED STILT, but nest more often a barren scrape on drier ground (e.g., dirt or gravel sewage pond dikes). Look for nests with eggs April-June.

KILLDEER -- More abundant and widespread in winter; use codes with caution before May. Nests on bare or gravel-covered ground often close to areas of human activity; even on rooftops. Distraction behavior ("broken-wing" near nest good indicator of nesting). Gravel bars along the American River are good nesting areas but good luck spotting the well-camouflaged eggs.

SPOTTED SANDPIPER – Nests along the American River. More common in winter so avoid use of POSSIBLE or PROBABLE before May. As in phalaropes, sex roles reversed with females courting and mating with multiple males. Singing (rolling 'weet-weet-weet') and aerial courtships displays are good indication of nesting as both occur almost exclusively on the breeding grounds. Singing can occur on the ground or in the air and both sexes may exhibit courtship behaviors.

WILSON'S PHALAROPE – Local nesting records (e.g., Sutter and Yolo Counties). Pay close attention to any birds (especially pairs alarmed by your presence) in appropriate habitat (wet meadows, rice fields) in the first half of June (these would be POSSIBLE breeders). Nest a grass-lined cup on the ground. Sex roles reversed (males are duller, tend nest and young).

LEAST TERN – Has nested at the Sacramento Regional WTP seven of the last nine years. Flat open areas with gravel preferred nesting sites. Rooftops with gravel (like some at UC Davis Hospital!) could attract nesting attempts.

BLACK TERN – Formerly a fairly common breeder in rice growing areas, but numbers much reduced, with no local reports of nesting in recent years. Nest a flimsy floating mass of marsh plant material, or along rice paddy dikes. Eggs have been observed May to June, young fledging from June through July. Normally encountered in our area only as spring migrants so avoid assigning POSSIBLE or PROBABLE before June.

DOUBLE-CRESTED CORMORANT – Nests colonially, usually in trees near large bodies of water or extensive marsh systems. Nonbreeding birds wander widely, and can show up anywhere, even in mid-summer. Probably safest to avoid POSSIBLE or PROBABLE categories at any time as wintering non-breeders may even roost in rookeries. Nesting generally easy to confirm and nesting has been confirmed as early as February in the county.

AMERICAN BITTERN – Birds seen in suitable habitat (marshes) in the period from mid-April to the end of August may be given POSSIBLE status.

LEAST BITTERN – Has nested nearby, so a possibility. Any record from April through August deserves a POSSIBLE.

GREAT BLUE HERON – Nest colonially, usually in trees near bodies of water or marshes. Large, bulky stick nests are hard to miss. Birds are in attendance at colonies from as early as February through July. These birds wander widely, and it is best to avoid use of the POSSIBLE and PROBABLE categories in assessing sightings.

GREAT EGRET – Comments as for Great Blue Heron, but begin breeding about a month later (i.e., March).

SNOWY EGRET – Comments as for Great Egret, except to note that this species will often nest in marsh vegetation (e.g., cattail/tule stands) instead of trees.

CATTLE EGRET – While a fairly rare bird in the county, they do nest here; non-breeding birds may wander into the county in summer. Therefore, reserve POSSIBLE (or higher) status for sightings of birds in colonies of other egret or heron species, May through July, if behavior is appropriate.

GREEN HERON – Typically solitary nesters in riparian situations and residential areas (e.g., in ornamental pines in the Greenhaven Lake area). Birds observed mid-April through August in suitable habitat may be listed as POSSIBLE.

BLACK-CROWNED NIGHT-HERON – Nests colonially, often with other herons and egrets. Comments as for Great Egret. NOTE: birds will gather into large day-roosting spots in dense vegetation and these sites should not be considered rookeries unless other breeding behavior is observed. They also (like Snowy Egrets) will breeding cattail/tule habitats.

WHITE-FACED IBIS – Has become a common to locally abundant breeder in the CV in recent decades. Nesting habitat always associated with water, but may use cattail/tule, trees or shrubs in a marsh, or small islands. Year-round resident so avoid use of POSSIBLE before May.

TURKEY VULTURE – Nests along cliffs, in caves, hollow logs and stumps, on ground in dense brush; build no real nest. These birds range widely, even when foraging; thus, do NOT use POSSIBLE category and ANY application of PROBABLE should be reserved for birds which appear to be visiting a probably nest site (i.e., breeding code “N”). If you get so lucky, may regurgitate food (bits of raw meat, half-chewed rodents, etc.!) on observers disturbing a nest. Nests rarely found and nesting behavior is poorly studied so let us know if you think you have found an active nest.

OSPREY – Has rebounded dramatically since the mid-70s and now breeds widely in the CV. Nests on raised platforms or trees. Huge stick nest unmistakable.

WHITE-TAILED KITE – A year-around resident, but there is some post-breeding dispersal and shifting to wintering areas. Courtship behavior is an easily-observed indicator of PROBABLE breeding, and begins as early as late January (as does nest-building). Mated pairs often remain together on their breeding territory through winter so a pair found close together from mid-January deserves a POSSIBLE. Eggs are laid in the period late February through May, with young coming off nests from May to July.

BALD EAGLE – Nests at Folsom Lake and might nest elsewhere as numbers continue to increase significantly throughout their range. Large stick nests usually fairly easy to spot.

NORTHERN HARRIER – More common as a winter visitor and migrant, so avoid use of POSSIBLE category until May. Spectacular up-and-down, "roller coaster" courtship flight observed as early as February. Nests on or near ground in marshes, wet meadows, and weedy fields. Eggs laid in April (and March?). Watch for adults carrying food repeatedly to same location in appropriate nesting habitat, May-July.

COOPER'S HAWK – Common in winter with a few remaining (or migrating in) to breed in the CV. Any adults seen mid-May to July are POSSIBLE breeders. Rather secretive during the breeding season; nests easily overlooked. Look for recently-fledged young from June-August. These are often quite vocal, still depend on parents, and often retain scattered patches of natal down.

RED-SHOULDERED HAWK – Another raptor whose numbers have increased dramatically in recent decades. Pairs court conspicuously; mating and nest-building in February and March; nests easily observed in bare trees then. Nests in riparian and residential areas. Females are incubating and brooding small chicks from March to the end of May. Large young visible on nests in May, most fledging in June.

SWAINSON'S HAWK – A migrant and summer visitor. Begin arriving in area mid-March, early April (occasionally in early March). Nesting cycle starts somewhat later than Red-shouldered Hawk, but young may be off nests by May. From June-August post-breeders wander widely, so avoid use of POSSIBLE category after May and do not assume fledged juveniles seen with adults came from nests within the block (i.e., concentrate on finding proof of nesting in April-

May). Note that there is a small population of over-wintering birds in the Delta which MIGHT be observed in the southern “toe” of Sacramento County.

RED-TAILED HAWK – Tremendous numbers of wintering birds complicate the picture in early spring. Avoid use of the POSSIBLE category until May (by which time you probably will have observed signs of nesting anyway). Otherwise, comments as for RED-SHOULDERED HAWK.

BARN OWL – The most frequently observed owl, nesting in tree cavities, nest boxes, buildings, crevices in cliffs and river banks. Egg laying from February to May, peak March-April. Noisy young seen in nests March-August. May double-brood in our area and chicks have been found in nest boxes into October.

WESTERN SCREECH-OWL – Widespread in woodland, including residential areas and particularly riparian areas, but easy to overlook. Have bred in nest boxes along the American River in the county (e.g. Wood Duck boxes). Calling begins February and March, egg dates March to June, peak in April. Fledglings reported late April through June and they may beg conspicuously in daylight conditions in early morning or late evening. Nest in cavities in trees, nest boxes.

GREAT HORNED OWL – The most easily observed nesting owl, nesting in abandoned (or stolen) nests of hawks, herons, squirrels, etc. Nesting may begin as early as late January. Males and females in pairs call to each other (male's call is lower-pitched). Many observed on nests March-April. Young leave nests by April, continue to associate with parents through the summer. Food-begging scream of young is blood-curdling.

BURROWING OWL – Formerly a fairly common resident, now extirpated from most of the county. They nest in burrows (frequently those of California ground squirrels) and human-made structures resembling burrows (e.g., pipes, culverts, gutter drains). Listen for courtship "cooing" near nest burrows in spring; Look for young outside nest burrows at dawn and dusk, May to September (eggs laid April-June). CAUTION: wintering birds regularly lingering through March without staying to breed.

LONG-EARED OWL – Most poorly known and understood of local nesting owls. Apparently rare, perhaps irregular, as a breeder in the county? Nesting has been reported in riparian woods (once) and orchards (twice), in the period April-July (nestlings seen in May; fledglings in July). Uses old nests of crows, magpies, hawks, etc.

SHORT-EARED OWL – Has been suspected of breeding locally (birds, including immatures seen in June and July and a likely nest found at Cosumnes Preserve many years ago). Nests on the ground in damp, weedy meadows and cultivated fields.

BELTED KINGFISHER – Nesting in burrows and banks along rivers and streams, digging nests March-April, laying eggs April-May (timing may vary, dependent on winter rains and subsequent water levels in spring). Watch for adults carrying fish to such sites, May-July.

ACORN WOODPECKER – These woodpeckers typically live and breed communally instead of in pairs. More than one female may deposit eggs in the same nest. All members of the commune participate in raising the nestlings. A breeding group is hard to miss, as they are quite noisy and active at breeding time. Nesting typically begins in March and April, with young being fed on the nest through May, fledging May-July. Require oaks (blue oak or valley oak) in their territories, but frequently nest in other trees. May raise additional broods later in the year (there are local records of young being fed in September, November and January).

NUTTALL'S WOODPECKER – The most widespread nesting woodpecker locally, occurring in all types of woodland, even residential neighborhoods. Territorial drumming starts to ramp up in January, peaking March. Watch for nest excavation in March and April, young being fed on the nest in the period April-June, and fledglings in June.

DOWNY WOODPECKER – Not as widespread as NUTTALL'S WOODPECKER, being more closely confined to riparian woods (but occurring also in residential areas). Nesting cycle as for NUTTALL'S.

NORTHERN FLICKER – Much more common in winter than in summer. Wintering birds typically depart by mid-April; consider birds seen after then as POSSIBLE breeders if seen in appropriate habitat (woods with large trees or snags). Nesting cycle roughly as for NUTTALL'S. Song of males is a prolonged series of "wick-wick-wick-wick-wick" notes as opposed to the calls (single "klee!" or series of two-syllabled "wicka-wicka-wicka"). Note that wintering males may sing in March and April BEFORE they leave (and on occasion in September when they first return).

AMERICAN KESTREL – Nest in tree cavities, woodpecker holes, holes and crannies in buildings and other structures. Most conspicuous at nest sites April-May; young fledge late May to August. Males will often "stand guard" near an active nest site. Otherwise, comments as for RED-SHOULDERED and RED-TAILED HAWKS.

PEREGRINE FALCON – Has nested on the Antioch bridge at the very southern edge of the county and likely nested downtown and on the UC Davis hospital building. Courting pairs are very vocal and begin courtship in February. Seeks covered perches on cliffs, buildings, bridges, or other structures. Eggs laid in March with young appearing April-June. Young usually detectable when they begin to beg and (later) exercise wings near nest. Adults may continue to feed young for weeks after fledging. Since most vocalization occurs in breeding season (and near the nest site), any vocalization in the right season deserves POSSIBLE and repeated instances of vocalization in the same area merits PROBABLE.

WESTERN WOOD-PEWEE – A common migrant and suspected rare breeder. Spring migrants, some still singing, are still moving through the area into mid-June (and fall migrants may show up as early as mid-July). Birds seen locally from about June 20 to July 10 in appropriate habitat (riparian woods with large trees, or oak-pine woodlands in the foothills, particularly along streams) may be considered POSSIBLE breeders. Calling birds seen outside this period should be considered OBSERVED (unless other evidence of breeding is obtained). Nesting occurs from late May through July.

WILLOW FLYCATCHER – Formerly nested in the Sacramento Valley in willow thickets, but no longer known to do so. A very late spring migrant (May-June). Migrants, some singing, may be found as late as the third week of June locally. Take careful note of any singing birds remaining at a site for more than a day or two in late June or early July.

PACIFIC-SLOPE FLYCATCHER – A common migrant and rare, local breeder in riparian woods. (CAUTION: spring migration can last through June, when singing/calling migrants may still be found locally). Nesting activity observed locally has been in May. Watch for signs of pair formation and nest building in shady streamside woods (especially near steep banks or bluffs) in late April and May. Nest may be low in the crotch of a tree or side of a stream bank or bluff, among roots of a fallen tree, atop a tree stump, even along the beam of an unused building.

BLACK PHOEBE – A very common breeder locally along streams, rivers, ponds, residential areas. Nest, principally made of mud, is placed under a bridge or below eaves, or along a concrete embankment or cliff face near or over water. Apparently raise two broods in our area. Look for nest building late February-March, nests with eggs March-April, nestlings being fed April-May, fledglings leaving nests May-June. Second nestings begin May-June.

ASH-THROATED FLYCATCHER – A fairly common breeder in riparian and foothill brushland with scattered trees or in oak savannah with some understory. Not found in dense woodlands lacking an understory. A cavity nester and may nest in odd locations (mailboxes, drain pipes) or nest boxes, but typically in natural cavities and woodpecker holes in trees. Arrive in April, at nests May-July, fledging young in June-July.

WESTERN KINGBIRD – A common breeding bird in open country. Stick nest usually in a tree, but also on telephone and power poles, fence posts, towers, windmills, buildings, etc. Arrive in mid-March, leave in August. On eggs by May, feeding nestlings May-June (occasionally in July). Adults noted locally tending fledglings in June and July.

LOGGERHEAD SHRIKE – Formerly a fairly common resident, but in widespread decline. Nests in open areas with scattered trees or large shrubs, in which the bulky stick nest is usually well concealed. Begin nesting in February and March, fledglings observed primarily May and June; occasionally raise 2 broods in one year.

BELL'S VIREO – The endangered California subspecies (“LEAST” BELL’S VIREO) had been largely extirpated from the CV. This taxon formerly nested widely in willow thickets. A few recent records of birds in the CV (including just across the border in Yolo County) give hope that the species MAY try to nest here again. Let us know IMMEDIATELY if you come across a Bell’s Vireo.

HUTTON'S VIREO – An uncommon local resident in oak woods, and riparian and residential woodland if oaks present (partial, but not restricted, to live oaks). Vocalizations, especially song, best indicators of presence and breeding activity. Listen for persistent singing, and look for pairs searching for nest sites and nest building in March and April (occasionally as early as February). Nest a deep, whitish, baseball-sized bowl hung in the fork of a small branch. Young on nests

April-May (singing may decrease--watch for adults carrying food), fledglings appear May-June. CAUTION: post-breeders wander through the area, some still singing, as early as June and July.

WARBLING VIREO – Not currently known to nest in the area, but supposedly did so in the early part of the century. Nests primarily June-July in the Sierra Nevada. Take careful note of any birds encountered late June to early July. Males sing while incubating eggs. CAUTION: birds in song (late migrants?) have been reported locally in mid-June and, like many other vireos, they will sing in fall migration as well.

ALL CORVIDS – CAUTION: With all corvids, be conservative about use of breeding code CF (carrying food) as these species often carry food to cache at any time of year.

CALIFORNIA SCRUB-JAY – Abundant, widespread, noisy and conspicuous, in all sites with trees and brush. Raise 2-3 broods/year. Build first nest in March-April, first fledglings seen mid-April through May. Second nests begin May-June, third attempts in July-August (dependent fledglings seen locally as late as mid-September). Nests hard to find. Watch for birds carrying nest material.

YELLOW-BILLED MAGPIE – Numbers reduced since West Nile virus outbreaks in the early 2000s, but still locally common in open woodland and parks and some suburban areas. Nest a conspicuous large mass of sticks, domed, with side entrance; usually in a tree but occasionally on a telephone pole or other structure. Nest building easily observed, late January through March. Young on nests from March through June.

AMERICAN CROW – Widespread and common, but surprisingly not so easy to find active nests; perhaps because the CROW'S nest (a large basket of twigs placed in branch crotch or near trunk of tree) and nesting behavior are less conspicuous than some other corvids (e.g. Yellow-billed Magpie). Most nesting activity from April to June; may be double-brooded. Watch for pairing in spring, and for birds carrying nest materials and food to nests.

COMMON RAVEN – In recent decades this species has colonized nearly all of the CV. Mostly found in open undeveloped habitats. Large stick nests generally easy to spot, esp. when placed in man-made structures such as telephone poles and high voltage towers. Nesting cycle begins more than a month earlier than American Crow.

HORNED LARK – Very common and widespread in winter, when many subspecies occur. The local resident breeding race is called the Ruddy Horned Lark because of the decidedly ruddy tone of the nape, back and sides. Ruddy Horned Larks nest in open, closely-cropped grasslands and pastures. Males sing from the ground or air. Eggs laid March-May. Look for adults feeding fledglings from May through July.

PURPLE MARTIN – A declining local breeder in downtown Sacramento, occupying drain holes under raised sections of freeways and holes and niches in buildings. In loose colonies or isolated pairs. Arrive in March, leave in August. Watch for adults feeding young at nests May-July. May raise 2 broods/season.

TREE SWALLOW – Widespread and common in woodland near water (ponds, streams, rivers). Nest in natural cavities, woodpecker holes, artificial nest sites (e.g., nest boxes). Arrive as early as January or February (some overwinter): pairs noisily searching out nest sites are easily found in February and March. Records of nestlings being fed range from April to July--are 2 broods raised per season locally or are late nestlings from birds whose first brood failed due to poor weather conditions in April?

VIOLET-GREEN SWALLOW – Has nested along the American River Parkway for the county, and still nests nearby around Folsom Lake and likely along Michigan Bar Rd at the eastern edge of the county. Oak savanna in the eastern county need to be checked. Nest may be in a natural cavity or woodpecker hole in a tree (usually an oak) or a hole in a cliff or bank. Look for nesting activity from late April through July (CAUTION: migrants may pass through in May and (including juveniles) July-August).

NORTHERN ROUGH-WINGED SWALLOW – Fairly common breeder from March through June (most active at nests in April-May). Typically found near streamside banks, cliffs and bridges, where nests are placed in natural and artificial tunnels (abandoned kingfisher burrows are frequently used) or in drain holes under freeway bypasses and bridges. Found in isolated pairs or small, loose colonies.

BANK SWALLOW – Formerly bred along the American River, but apparently extirpated from those sites in the early 2000s. Highly colonial, nesting close together in holes dug by the birds in a dirt bank along or near water. At colonies from April to July. Cliff faces along the American River could be re-colonized. Cut banks along the Cosumnes River at the eastern end of the county may be worth checking. CAUTION: distinguish with care from the more numerous N. ROUGH-WINGED SWALLOW and juvenile TREE SWALLOWS.

CLIFF SWALLOW – A common breeder locally, in colonies, often of hundreds of birds. Build distinctive gourd-shaped nests of mud with down-facing entrance holes. Colonies established in culverts, under bridges and freeway overpasses, and along sides of buildings and cliff and dam faces. Arrive in second half of February. Watch for CLIFF and BARN SWALLOWS gathering mud for nests from along borders of ponds, puddles, streams, etc., in March and April. Look for young at nest entrances April-June. Locally, fledglings reported from May to July.

BARN SWALLOW – A common breeding species, Nest half-cup-shaped, of mud pellets placed under a bridge or other shaded vertical surface; usually only a single pair or a few pairs per site. Typically arrive in March, nesting cycle roughly like that of CLIFF SWALLOW: may raise 2-3 broods per season.

OAK TITMOUSE – Common resident of oak woods, residential areas with oaks, and riparian woods. Nests in woodpecker hole or natural cavity, occasionally in artificial cavity. Nest building usually observed mid-February to mid-March, feeding of young on nest from end of March through May, fledglings off nests mid-April to June. Some nest again June-August.

BUSHTIT – Common resident in woods and tall brush and in residential area, in flocks except when paired and breeding. Nest distinctive, a surprisingly large pendant pouch of plant material

and lichens, woven together with spider silk and hung in the twigs of a tree or bush, usually within 2-3 meters of the ground. Entrance a hole on one side near the top. Often nest in live oaks and other trees leafed out in February, when nest building begins. But nests usually not well hidden; indeed, easy to find. Nesting cycle like OAK TITMOUSE's, generally starting a week or so earlier.

WHITE-BREASTED NUTHATCH – Locally common, but nowhere in high densities. Seems restricted to woods containing blue or valley oaks. Our local subspecies may give its “tuey-tuey-tuey” song at any time of the year, but becomes much more frequent in nesting season. Nest in natural cavity or woodpecker hole. Look for nest building late February to mid-April, adults feeding young on the nest April-May, fledglings May-June.

BROWN CREEPER – May have nested in riparian habitats in the County and has been confirmed in other CV counties. Builds its nest almost exclusively behind a piece of bark partially separated from a tree trunk and prefers area with a dense canopy cover. Typically begins nesting in its more typical high elevation locations in May but April is more likely for any CV nesting. A singing bird in late April or May merits POSSIBLE status and deserves careful follow-up.

ROCK WREN – Local and uncommon, in foothill stream and river canyons and along cliffs and rocky hillsides. Commonly found in areas around Folsom Lake when lake levels are low. Some wander to the valley floor in winter, so be cautious of birds seen "out of habitat" in the spring. Nest difficult to find, in crevice in rock outcrop or amid rock pile and surprisingly little is known of nesting habits. Nesting activity reported in this area in April-May.

HOUSE WREN – Fairly common breeder in riparian woods and other brushy/woody sites (prefers scattered bushes amid large trees). Often coexists with BEWICK'S WREN. Disperse widely following nesting; many depart in winter (BEWICK'S WRENS are mostly sedentary). CAUTION: Birds seen after July 1 in areas where not present May-June are probably post-breeding dispersers, and birds found singing in March-April may be wintering birds who may leave the site in May. Confirm presence through the summer to establish POSSIBLE or PROBABLE breeding. Nest in natural and artificial cavities and woodpecker holes, near ground level to the tree tops. Some nesting in March, but peak activity in April-May. Second broods may be raised May-July.

MARSH WREN – Breeds in cattail and tule marshes. Locally common. Males conspicuous in February and March, establishing territories and attracting mates through song and the building of "dummy" nests (often MANY). Therefore, this is a species for which observation of nest-building (code NB) rates PROBABLE status, not CONFIRMED. Female builds the brood nest. The nest is an upright oval mass of interwoven marsh plant stems with a side entrance, lashed to the stems of aquatic vegetation. Nesting activity seen locally from April through August.

BEWICK'S WREN – Common, widespread resident in brush and brushy woods, including residential areas. Nest usually near the ground in natural cavity or woodpecker hole in tree, rock crevice, amid root tangles. Like HOUSE WREN, may nest in odd sites (drain pipes, mailboxes, etc.). Unlike House Wrens, Bewick's Wrens reside year-round on territory and sing through the

winter. Courtship and nesting begin in March, eggs laid and nestlings fed April-May, fledglings appearing late April through June. Second and late nesting attempts made May-August.

BLUE-GRAY GNATCATCHER – Has nested in adjacent counties (Yolo and El Dorado) in chaparral and scrub oak woodland. Look for nesting activity April-June. Nest is like a large hummingbird's, attractively decorated with lichens, plant down, etc., placed fairly low in a bush or small tree.

WRENTIT – Uncommon, local resident in chaparral in the foothills, and dense riparian tangles and brambles from just south of Sacramento to the Delta. Vocalizations best key to presence. Nesting is difficult to prove, as the nest, a neat cup of twigs and fibers, is hard to find in dense brush. Watch for dependent fledglings (nesting March-June). Cosumnes Preserve is currently the best place to find this extraordinarily sedentary species.

WESTERN BLUEBIRD – Fairly common local breeder in open woodland, parks. Nest in natural cavity, woodpecker hole, nest boxes. Nesting activity has been noted mid-March through July. Pairs may be seen checking out cavities as early mid-winter!. May raise 2 broods/season. Look for adults carrying food to nest.

SWAINSON'S THRUSH – Formerly nested in the county and birds were found through summer in 2002 at Cosumnes Preserve. An inhabitant of prime, dense willow-alder stands. CAUTION: Migrates late (May, some in early June), and migrants may be singing.

AMERICAN ROBIN – Very common nesting bird in all types of woodlands, including residential yards and downtown parks. Nesting activity from April-September (not unusual to raise 2-3 broods a year). Nest often fairly conspicuous. You should have no problem with this one!

CALIFORNIA THRASHER – Breeds in foothill chaparral; observed or suspected nesting in the county near Folsom, upper Amer. River Parkway. Nest very hard to find. Peak nesting activity observed locally in May (feeding young on the nest). Singing in early morning best evidence of presence.

NORTHERN MOCKINGBIRD – Very common in residential areas, brushy woods, chaparral. Bulky twig nest may be hard to spot in dense bush or small tree, but is often built close to a house or other structure. The pair will be very aggressive toward other birds (or cats) near the nest site so that could lead you to the nest location. Watch for birds carrying twigs. Begin nest building in March, on eggs March-April, feeding nestlings April-June. Fledglings may appear as early as April, most May-July. Juvenile vocalization diagnostic (<http://www.xeno-canto.org/269619>). Second broods may be raised June-September. Adults very aggressive towards intruders (humans, cats, other birds, etc.) near nests.

EUROPEAN STARLING – An abundant and widespread resident, nesting in almost any kind of cavity (woodpecker hole, natural tree cavity, nest box, drain pipe, etc.). Aggressively usurp nesting cavities of other hole-nesting species. Noisy, conspicuous breeders (young easily heard

calling from within nest cavities). Nesting noted locally from March (occasionally February) to June, peak activity April-May (may raise 2 broods/year).

PHAINOPEPLA – No nesting records for county, but might nest along eastern boundary in scrub oak and foothill riparian woodland, March-June. Birds seen regularly along upper American River well into summer. Nests built by males, who also share in incubation. Nest a compact, shallow cup, small for size of bird, occasionally placed in a clump of mistletoe.

HOUSE SPARROW – Abundant and widespread. Almost entirely restricted to nesting in cavities in human-made structures, but occasionally nests in holes in trees, banks, etc. In pairs or loose colonies. May raise 2-3 broods in the period April-August. Noisy and aggressive, nearly impossible to miss--check parking lots of mini-marts and fast-food places for fledglings begging from adults!

HOUSE FINCH – Very common resident in many habitats. While the well-made cup nest of plant fibers may be placed almost anywhere (usually above ground in a tree or shrub), this species is partial to nesting on or near human habitations. Often nests in eaves, hanging planters, bird houses, etc. May appropriate nests of other species. Eggs laid from mid-April through summer (some raise two broods). Peak of nesting activity usually in May.

LESSER GOLDFINCH – A fairly common breeder locally, most reports of nesting coming from the American River Parkway and foothills. Widespread in open brushy or wooded habitats, particularly oak woods, savannah, and riparian scrub. Nesting locally has been reported from April through June, with fledglings reported May and June, sometimes into August. Male feeds mate on nest, a small cup of plant material placed in a tree or shrub, high or low.

LAWRENCE'S GOLDFINCH – A rare local breeder in oak woodlands and savannah (Deer Creek Preserve). Reports of local nesting are from in May (nest building reported mid-April, fledglings reported by mid-May). Male feeds mate on nest.

AMERICAN GOLDFINCH – Fairly common and widespread, habits similar to LESSER GOLDFINCH. Mostly breeds in riparian areas. Locally, reported from April through July, peak in May-June and fledglings have been observed into August.

ORANGE-CROWNED WARBLER – A rare breeder in dense brush in the Folsom area, along the upper American River Parkway, and perhaps elsewhere in the county. Breeding somewhat hard to pin down for a number of reasons. Nests, built on or near the ground in dense brush, are hard to find. Second, during the local breeding season (late March-May), breeders are outnumbered by migrants, many of them singing. CAUTION must be used in distinguishing breeders from migrants; and, as early as the first week in June, from post-breeders from outside the county. Watch for birds carrying food and follow them closely, and listen for distinctive song types heard repeatedly (i.e., over a number of weeks) at the same site. Territorial males apparently change their singing behavior after nesting has begun: They greatly curtail their singing rates after dawn (post-dawn singing rates are higher during courtship and mating). Frequent visits to suspected nesting sites should detect breeding if it is occurring.

COMMON YELLOWTHROAT – Breeds in marshes and marshy riparian borders. Consider June and July as the breeding season (birds seen and heard in May could be migrants).

YELLOW WARBLER – Historically a widespread breeder in CV riparian habitats, now a very rare local breeder, much more common as a migrant (CAUTION: singing migrants occur into mid-June). Nests in riparian shrubs and saplings, usually willows. Peak nesting activity from mid-May through June. Nest a cup of woven plant fibers and grass stems placed low (1-3 m) in an upright fork of branches; usually easy to find.

YELLOW-BREASTED CHAT – Not certainly known to nest in the county, but breeds in riparian tangles along foothill streams in El Dorado and Amador counties, and possibly in the Sacramento-San Joaquin Delta. Birds singing well into summer in Folsom suggests breeding their possible. Returns to our area in late April, early May; nesting May-July. Song of male hard to miss, but otherwise a shy and secretive bird.

SPOTTED TOWHEE – A common resident in dense brush and riparian tangles. Nests are hard to find, on or near ground in dense brush. Best evidence of nesting is observation of adults carrying food--and acting agitated near the nest--or feeding recently fledged young (streaked, dark brown body plumage very unlike adult's). Begin nest building in early April, on eggs April-May, fledging young by late May, then on eggs again by late June. Not unusual to raise 2-3 broods/year, fledglings being seen into October.

RUFOUS-CROWNED SPARROW – A resident of weedy/brushy, uneven terrain with scattered rocks, as along the American River Parkway from Nimbus to Folsom. CAUTION: there is some downslope movement in winter, so single birds seen at lower elevations in early spring (through March) may not be in nesting territories. Mating and nest building begins in late March and April. Fledglings seen as early as the first week of May, through June. Shy and skulking. Ground nest hard to find. Song and calls best clue to presence.

CALIFORNIA TOWHEE – A fairly common resident of foothill brush, scattered and local on the valley floor in riparian scrub and residential yards. Members of a mated pair usually stick closely together. Nest very hard to find, placed low in dense brush. Peak of local nesting activity in May-June (may begin in April, and fledglings (from second nestings?) have been encountered in August).

LARK SPARROW – A fairly common breeder in oak savannah and open country with scattered trees, brush. Much more common and widespread in winter (and birds may sing any time of year), often in flocks. Be careful about assigning POSSIBLE (or higher) breeding status, without good evidence, to birds seen outside of June and July. Egg laying noted locally in April and May, fledglings seen May-July. Nest usually a depression in grass on ground near base of tree or shrub, but occasionally placed above ground on twig platform.

SAVANNAH SPARROW – The “Bryant’s” subspecies is resident in Delta tidal marsh habitats and, less frequently in grasslands, and appears to be moving into upstream habitats with singing birds detected well into summer in eastern Yolo County. CAUTION: wintering subspecies will

begin singing before they leave with singing birds often detected well into May. Breeds April through July.

GRASSHOPPER SPARROW – Breeds in eastern Sacramento County grasslands (along Meiss Rd). Prefers non-weedy grasslands with vegetation of medium height. Insect-like song should be listened for at any possible nesting sites, May-June. Finding nests nearly impossible but fledglings may perch along fencelines to be fed.

SONG SPARROW – Now a common breeder in marshes and marshy riparian borders. The local nesting race, the Modesto Song Sparrow, is primarily a resident of cattail marshes, breeding from April-July (peak of activity in May-June). Cup nest placed low in emergent vegetation.

CAUTION: individuals of a number of other races breeding to the north of the county winter in our area from September to mid-May. These wintering birds often occur in riparian brush and other weedy/brushy habitats not favored by the local nesting race. Modesto Song Sparrows are fairly dark brown and gray above with blackish-brown streaks on the underparts; wintering birds of other races are usually either rustier above with rusty brown streaking below, or paler and grayer above with fine brown streaks on the underparts.

DARK-EYED JUNCO – A rare breeder in CV riparian habitats. Has nested at Cosumnes River Preserve most years. Wintering birds and migrants present through April so **POSSIBLE** or **PROBABLE** should not be used before mid-May.

BLACK-HEADED GROSBEAK – Fairly uncommon breeder in open deciduous woods, including residential yards; most numerous in riparian groves. Nest a somewhat flimsy cup of twigs, usually within 3-4 meters of the ground in a tree or shrub, often near water. Both male and female sing while incubating eggs (tracking down singing birds is a good way to find nests). Male also sings in a flight display over the tops of the trees in his territory. Incubation noted from end of April through early June, young being fed on nests from May to June, fledglings from late May to July (juvenile call example: <http://www.xeno-canto.org/147923>). **CAUTION:** Migrants greatly outnumber breeders in spring and sing frequently in migration.

BLUE GROSBEAK – A fairly common breeder in riparian brush and weedy borders of marshes. Breed locally from May-August. Nest usually low in dense brush or weeds. Watch for birds carrying nest materials in May, food for young in June-July.

LAZULI BUNTING – An irregular breeder in weedy/brushy areas in the foothills and along lowland riparian flood-plains. Prefers areas of dense grass, weeds, with scattered shrubs or small trees (used for song perches). Territories tend to "cluster" in prime habitats. Nest a grass cup placed low in dense shrub, weeds or grasses. **CAUTION:** males without territories occasionally encountered wandering about singing in search of a territory or mate, May-July. Use multiple visits to confirm singing birds are indeed on territory. Nesting activity noted in our area from late April through August; occasionally double-brooded.

INDIGO BUNTING – Although a vagrant to the state, they have bred locally with Lazuli Buntings. Habitat similar to Lazuli.

RED-WINGED BLACKBIRD – A very common nesting species in marshes, cattail-filled ditches, marshy riparian growth, moist weedy areas, croplands and rice field borders. Loosely colonial or solitary when breeding. Local breeding race, the Bicolored Redwing, has entire shoulder patch red; wintering races from farther north have yellow-bordered red patches. Males begin establishing territories as early as late January (displays and singing usually quite conspicuous), but mating and nesting occur primarily in March and April. Nest a cup of woven marsh plant stems, usually placed low in emergent vegetation. Young being fed on nests April-May (watch for adults carrying food, often from some distance away from the nests), fledglings being seen by late May-June. Second broods may be raised during the summer.

TRICOLORED BLACKBIRD – Localized breeder in the county in colonies of from about 50-100 pairs to 1000s of birds. Nest in marshes and dense, moist stands of tall weeds as well as in blackberry patches in open grassland/savanna habitats (the main breeding habitat used in Sacramento County). Very gregarious. Nesting colonies are highly synchronized, all nests being at the same stage of the nesting cycle simultaneously. Peak nesting period usually in April and May, but this varies with the amount and timing of winter and spring rains. CAUTION: There is a period in late May and June when flocks of these birds are "on the move," and may be seen flying low and occasionally landing briefly almost anywhere in the county. These are either post-breeders, non-breeders or birds seeking food for young on nests which may be some distance away (i.e., in another block). Because of this phenomenon, and because Tricolors only nest in obvious colonies, avoid use of POSSIBLE and PROBABLE codes entirely.

WESTERN MEADOWLARK – An abundant winterer and common breeder in open grassy areas, including grain fields and pastures. Requires fairly high, dense grass in which to hide domed nest constructed of grass stems. Nests hard to find. Peak of nesting activity (incubation and feeding of nestlings) locally is in April and May (second broods may be raised in the summer). Watch for adults carrying food. Look for recently fledged young from May through the summer.

YELLOW-HEADED BLACKBIRD – A rare, localized breeder, formerly more widespread, in colonies in cattail marshes. Nesting behavior similar to RED-WINGED BLACKBIRD, but more strictly colonial (colonies usually segregated from other marsh blackbird colonies) and confined to marshes. Males are polygamous. Arrive on territories later than RED-WINGED BLACKBIRDS (in April), peak of nesting activity in our area is in May and June.

BREWER'S BLACKBIRD – A common, widespread resident in open areas with trees or large shrubs. One of the characteristic birds of residential areas and parks. Nest in pairs or small, loosely-knit colonies. May nest on ground, but usually in dense, broadleaf trees or shrubs or small conifers. Often, all birds in a colony nest in the same type of vegetation. Birds in active colonies will hover about and harass intruders near nests. Peak of nesting activity in April and May. Second broods often raised in June-July. Study adults feeding fledglings (May-August) carefully, as this is a frequent host of the BROWN-HEADED COWBIRD. Young BREWER'S BLACKBIRDS look essentially like their mothers, whereas juvenal-plumaged cowbirds are slightly smaller, with shorter, more conical beaks, and lighter, buffy or grayish plumage.

GREAT-TAILED GRACKLE – This species has spread through California and the CV at a remarkable rate in the past decade or so and is now a locally-common breeder in wetland habitats, usually near human habitation. Some over-winter so avoid POSSIBLE or PROBABLE until at least mid-April. Note that single males will often “prospect” new potential breeding sites well before any actual breeding occurs.

BROWN-HEADED COWBIRD – A common local breeder. Does not build own nest. Eggs are laid in nests of other birds, who raise the cowbird young as if they were their own. Widespread, laying eggs in the nests of a wide range of small to medium-sized songbirds in all local habitats. Reports of host species used locally include Western Kingbird, Wrentit, Hutton's Vireo, Yellow Warbler, Black-headed Grosbeak, Spotted and California Towhees, Song Sparrow, Red-winged and Brewer's Blackbirds, Hooded Oriole, House Finch, American Goldfinch. Finding a cowbird egg or young being attended by a foster parent constitutes evidence of breeding both for the parasite and the host species. Females give a "chatter" or "rattle" call essentially only when breeding (April-July). Egg-laying season locally is from late April through early July. Watch for males courting, singing, and following females.

HOODED ORIOLE – An uncommon, localized breeding bird in residential areas with fan palms, open riparian woods, and rural residential areas. Somewhat pendant, oriole- type nest made of shredded palm fibers or similar material, usually hung from undersurface of live fan palm leaf, but may be placed under leaves of other types of palms or even in other kinds of trees (eucalyptus, sycamore, cottonwood, etc.). Territories very large, and birds may be difficult to track to nests. Check all fan palms carefully in areas harboring these birds. Locally, nest building has been reported in May and (second broods) July, with fledglings being reported from June through September.

BULLOCK'S ORIOLE – A common breeder in all local wooded habitats. Nests rather distinctive, a pouch, open at top, slung from slender branches usually fairly high in the outer part of a tree or tall shrub. Males arrive in late March, early April. Nest building noted in April and early May, young on nests May-June, fledglings from May to early July.

SECTION THREE:

The following pages show the date ranges for all potential breeders in Sacramento County. They are color-coded based on the likelihood of being found breeding here.

