

**Appendix A:
Swainson Hawk Mitigation Support**

THIS PAGE INTENTIONALLY LEFT BLANK

From: [Jim Estep](#)
To: [Janna Waligorski](#)
Cc: [Robert Carroll](#); [Maddie Dolan](#); [Mary Bean](#)
Subject: RE: Request for Swainson Hawk Mitigation Support
Date: Thursday, August 22, 2024 12:41:31 PM
Attachments: [image002.png](#)

Caution: This is an external email and may contain suspicious subject or content. Please take care when clicking links or opening attachments. When in doubt, please contact your IT Department

Hi Janna,

I am not available to take on any tasks until at least the first of the year. However, I did a quick review of the bio section for your project, and despite the SWHA section being a bit out of date and misleading (although not particularly relevant to the impact/mitigation) (for example, CV SWHA are not known to winter in the Argentinian Pampas where the use of the pesticide issues were identified – see Airola et al. 2019, JRR 53(3)), I think the mitigation and use of the 600-foot buffer is appropriate. You might point out to the CDFW folks that there never was any data-supported rationale for the 0.5 mile buffer. This distance was selected to maximally ensure that disturbance impacts would not influence nesting behavior or success. In that regard, and due to the lack of information at the time, although arbitrary it was appropriate that the buffer be highly conservative. Today, however – 30 years after the guidelines were prepared – we have lots of experience and examples of the high degree of tolerance of nesting Swainson’s hawks to noise and other disturbances. Although a specific study has not been conducted to better establish a more data-driven buffer distance, we know that the 0.5 mile distance is unnecessarily large. We have many examples of active, successful nests immediately adjacent to a variety of disturbances. Most of the examples of disturbance-related nest abandonment that I am aware of involve direct impacts to nest trees or disturbances occurring in the immediate vicinity of active nests (including those caused by biologists closely observing nests for long periods). The 600-foot buffer identified in the SWHATAC guidelines originated from work that Mike Bradbury, formerly with DWR, was conducting on the barriers project in the Sacramento-San Joaquin Delta. Through a significant amount of monitoring of active nests, they determined that 600 feet was a reasonable buffer distance in most cases.

That said, it remains important to look at each case independently and to consider and minimize all potential disturbances. Other things also come into play, such as line-of-sight, topography, tree structure and height, and existing ongoing disturbances – such as roadways and proximity to existing development and related disturbances. Timing can also be important – the period of nest establishment and incubation (mid-March to mid-May) are the most sensitive. Once nestlings are present, the potential for nest abandonment decreases substantially. These can all be important in minimizing the chance of nest abandonment and establishing an appropriate no-disturbance buffer. But the species is quite tolerant (note the use of roadside trees, urban nests, etc.), and a 0.5 mile buffer is unlikely to be necessary in most or all cases. So, I would support a 600-foot buffer as a general starting place, but an assessment of the specific site conditions should be conducted to support the findings and any remedies.

Jim

Jim Estep
Estep Environmental Consulting
3202 Spinning Rod Way
Sacramento, CA 95833
916-921-2515
jim.estep@comcast.net
