

**Comments on the Coyote Valley Specific Plan's DEIR**

**by Tanya Diamond, tdseeker @msn.com, June 28 2007**

I am a graduate student at San Jose State University researching North American Badgers. For my thesis work I conducted several corridor analyses within the Coyote Valley region. I am also currently collaborating with Jessie Quinn, PhD. candidate, at UC Davis, on the current Species of Special Concern report on badgers for the California Department of Fish & Game.

North American badgers in California are listed as a Species of Special Concern. However, in the Coyote Valley Specific Plan's DEIR there are no biological impacts or mitigation for badgers within the report. On January 29, 2007, the Elkhorn Slough Coastal Training program hosted the Sierra Azul Wildlife Connectivity Decision Makers Workshop. At this workshop the biological consultants from WRA Environmental Consultants, who wrote the DEIR were present. At this meeting I clearly outlined in detail, badger locations within the area and the negative impacts that the Coyote Valley Specific Plan would have on badgers. Below is a copy of one of the slides I presented at this workshop.

The reason for grave concern about this plan in terms of badger movement from the Diablo Range to the Santa Cruz range, is that badgers exist in small populations but have large home ranges of up to 20km<sup>2</sup> (Quinn pers com). Badgers must be able to access other badger home ranges to find viable mates via a wildlife corridor. It has been demonstrated that corridors can facilitate the movement of species through habitat patches by providing connectivity (Hilty *et al* 2006, Soule and Gilpin 1991). Connectivity between habitat patches is critical to maintain genetic viability and maintain viable populations of wildlife (Noss, 1987, Buza et al 2000). Wildlife corridors facilitate the movement for wildlife species to find mates, resources, and for juveniles to disperse out of their parental home range (Beier 1983).

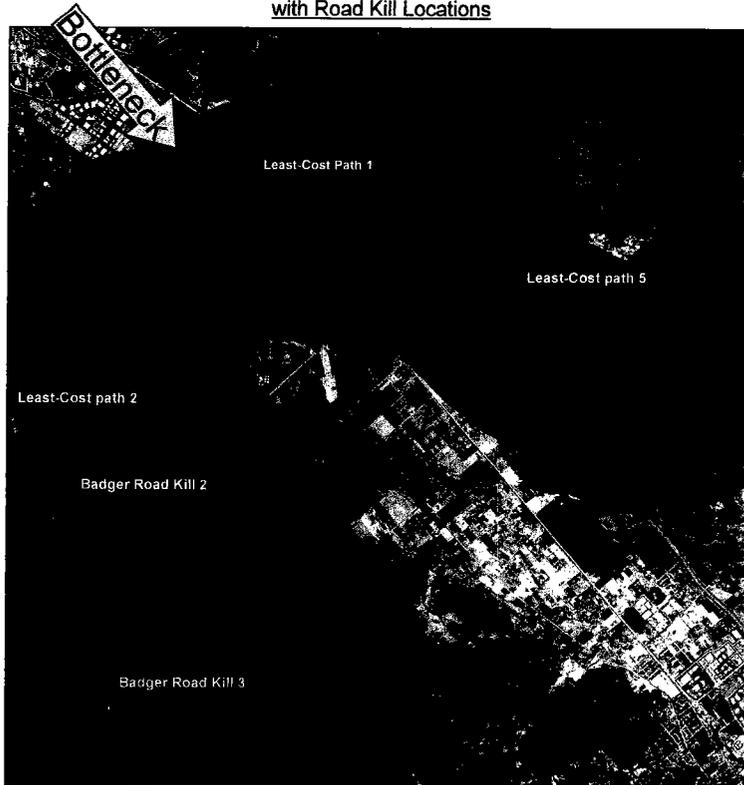
There are several reason why badgers will be significantly impacted by the Coyote Valley Specific Plan as it is proposed. Badgers are very sensitive to human development and require large grassland habitats to exist (Crooks 2002). From my corridor analyses, Tulare Hill has been found to be a critical stepping stone for badger movement from the east to west hills as well as critical habitat for them to reside at. Badgers are also present at Henry Coe State Park, United Technologies Company, Coyote Ridge Ecological Preserve, Santa Teresa County park, and Calero County Park. From the corridor analyses that I ran using GIS, these regions and a significant portion of the north section of Coyote Valley serve as a critical corridor to facilitate badger movement between habitat patches, Badger corridors need to consist of at least 1.8 km, which is the width of the average of the largest badger home range sizes from studies within the US (Harrison 1992; Lindzey 1978; Sargeant & Warner 1972; Lampe & Sovada 1981; Messick & Hornocker; Goodrich & Buskirk 1998, Minta 1993; Hoff 1998; Collins 2003; Quinn current thesis work).

**RECEIVED**

JUN 29 2007

CITY OF SAN JOSE  
DEVELOPMENT SERVICES

**Santa Clara County Badger Least-Cost Path Analyses  
with Road Kill Locations**



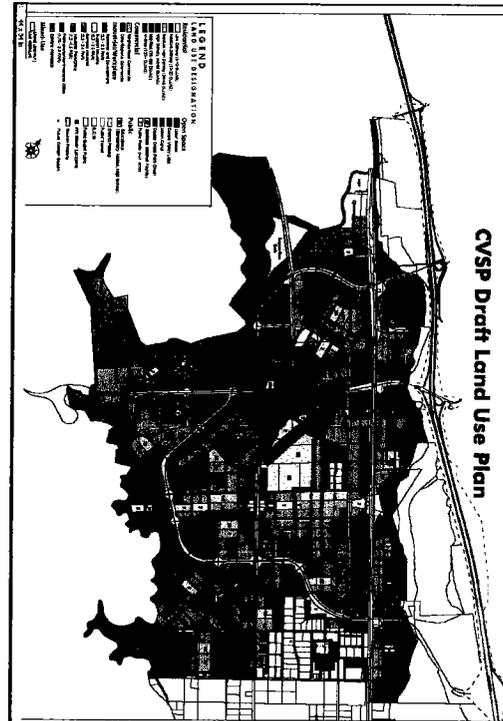
**Legend**

- Badger Burrows
- Corridor Buffers 1.8 km
- Santa Clara Least-Cost Paths
- Badger Road Kill 2, Santa Clara, McKean & Bailey Rd.
- Badger Road Kill 3, Santa Clara, McKean & Uvas Rd.

Data Source:  
<http://geocomm.com>  
Zone Projection: NAD 1983 UTM Zone 10N  
Scale: 1:174550

Map by: Tanya Diamond  
tdseeker@msn.com  
San Jose State University

**San Jose City's Coyote Valley  
Development Plan**



- Development would restrict badger movement through Coyote Valley:  
-due to such a highly consolidated urban design

As you can see from the map, development from the north of Tulare Hill compromises almost 1/4 of the needed corridor. The Coyote Valley Specific Plan development, which would come up to be base of Tulare Hill would create a severe bottleneck, which would cut off connectivity for badgers through this region as Tulare Hill will no longer serve as a stepping stone for badger movement due to human disturbance, such as noise, lights, ect.

This is a very important concern for badgers as they exist in small populations and low densities because of their large home ranges and a drastic population decline within the last century (Williams 1986). Further efforts will be made to see if badgers should be federally listed. Genetic isolation of badgers due to fragmentation from the Coyote Valley Specific Plan could result in badgers becoming a listed species which results in

very costly management efforts for developers, the City of San Jose, and resource agencies.

1) Why weren't these issues for the impacts on badger and connectivity issues addressed by the consulting staff of the DEIR?

Another, very important concern for badgers is the effects of increased traffic volume within the Coyote Valley areas. With the proposed development, Santa Teresa road and Monterey Highway would experience a significant increase in traffic volume. This is a concern in terms of badger because they are very susceptible to road mortality from cars because they have poor vision, are nocturnal, and tend to travel by olfactory cues (Minta 1993). Several studies have shown that road mortality is a severe threat for badgers. In an Idaho badger study, 59% of 157 mortalities were due to road kill (Messick et al 1981). A British Columbia badger study stated that road mortality was highly significant, in which 5 out of 7 mortalities were due to road kills (Hoodicoff 1998).

High use roads and highways often bisect a badger's home range because they are often located in valley bottoms and low slope areas, resulting in forcing them to cross roads. This was also found to be true within the counties of Santa Clara, San Mateo, and Santa Cruz in northern California (Diamond thesis in progress). High roads often consist of median dividers. These road medians are very hazardous for badgers because they tend get trapped at medians that are too high for them to get over. These medians act as barriers for badger movement. Badgers have been observed getting trapped between the median and cars in which they run alongside the median, which often results in being struck by a car. (Hoodicoff 1998, Santa Clara Vector Control 2006). An increase in traffic volume along Monterey Highway will most likely result in an increase in badger mortality, which will result in decreasing the local badger populations. Modifying these types of road structures to allow badgers to cross through would help decrease badger road mortalities (Hoodicoff 1998). 2) Is this type of road modification to facilitate wildlife movement due to the increase in traffic volume from the development something that can be implemented by DEIR staff?

Another aspect of why road mortality is a threat to badgers is that during the summer breeding months, males double their movement rates and have been found to triple their home range areas to locate females (Minta 1993). Because of the fact that badgers have relatively large home ranges, up to 20km<sup>2</sup>, males must travel large distance to find female mates (Quinn, thesis in progress, Minta 1993). It has also been found that males searching for scarce females may attract each other into areas of high use roads (Minta 1993).

Juvenile badgers also tend to leave their home ranges to establish their own. In the case of highly fragmented landscapes, badgers must often travel across high use roads. For example, Tulare Hill, in Santa Clara County, exhibited a possible natal den from the summer of 2006. Tulare Hill is only large enough to inhabit the home range of one badger. The hill is surrounded by high use roads. Since 2006, there have been 5 reported badger road kills within the immediate location of the hill (Santa Clara Animal

Control, Congdon 2007). Monterey highway which is adjacent to the hill consists of a large median, in which a badger could not cross over. There have been 3 reported badger road kills along this highway because badgers become trapped along the divider (Santa Clara Vector Control 2007). An increase in traffic volume from the development that would occur from the proposed plans is a severe threat to local badger populations.

To further address this issue, on June 29, 2007, I identified a road killed badger on Bailey Avenue, between Monterey Highway and Santa Teresa road. The badger was located at the north side of Bailey, adjacent to agricultural fields by Tulare Hill. This badger was a juvenile badger, most likely dispersing out of a parental home range. Last year, a badger natal den was identified at Tulare Hill. This road killed badger might have been a juvenile from a natal den from this season dispersing from Tulare Hill. Lastly, the DEIR states that agricultural fields can act as a barrier to wildlife movement. This is not the case for badgers. Badgers will travel through agricultural fields (Quinn, per com, 2007).

**3) Does the DEIR staff understand that an increase in traffic volume from the development plan if built, will severely negatively impact badgers?**

**4) Does the DEIR staff understand that the way the Coyote Valley specific plan is designed at present, it will most likely drive badgers to become locally extinct in the area?**

5) Will these issues for North American badgers in terms of the negative impacts by the development plan and connectivity issues be addressed by the DEIR staff?

6) Will this wildlife corridor which facilitates the movement of badgers from the east hills of the Diablo Range to the west hills of the Santa Cruz Mts., be maintained by modifications within the Coyote Valley Specific Plan?

7) Will the DEIR be revised or redone due to so many directly false assumptions and statements?

8) Will this wildlife corridor, which has been identified as a critical connectivity region by corridor experts, be cut off by the development plans or will there be discussions with DEIR staff for plans on how keep the wildlife corridor intact (Thorne et al 2002) ?

I would be more than happy to come in and discuss these issues further and to go over the badger corridor analyses with planning staff.