

California Equestrian Trails & Lands Coalition

June 2005

Safety Considerations for Multi-use Trails

CET&LC is continuing to develop specific design and enforcement standards for proposed and designated multi-use trails. The primary concern of our member organizations regarding multi-use trails is the safety of these trails for equestrians. The recent need (since about 1985) for multi-use trails is primarily to accommodate the addition of mountain bicycle use. **In order to safely accommodate bicycles that travel much faster than equestrian or hikers, specific trail design standards and safety guidelines are required to provide safe use for all.**

The CET&LC represents most organized recreational equestrian groups in California with 46,000 members. It is estimated that there are over 400,000 recreational riders in California. Many of these people ride trails as part of their recreational enjoyment.

The CET&LC offers general comments on conditions necessary to make the trail use experience positive, safe and enjoyable for all users. Also included is a set of **Trail User Guidelines** for issuance to every user at the trailhead.

1. From the equestrian user's perspective, mountain biking use has become a safety issue and needs to be addressed on all trail conversion decisions, as well as new trail construction, to help alleviate the conflict among users. The CET&LC supports multi-use trails where appropriate. In recent discussions with California State Parks staff in Sacramento on how best to define safe practices that will allow users to continue enjoying multi-use trails, we have recommended a number of safety provisions. The term "appropriate" means trail portions where terrain and slope do not limit the safe passage between equestrian and bike users. Inappropriate trails should not be designated multi-use until corrected. CET&LC is committed to working with State parks, other agencies and other users to develop a set of safety guidelines that is acceptable to all users.
2. Some users have commented that it is a "perception of safety" when considering conversion of trails to multi-use. To the equestrian community, it is more than a perception; it is a true evaluation of the safety circumstances, including the likelihood of increased risk to other trail users. Speed by other users is a major problem for horses, especially around blind or limited visibility curves. Trails can be designed to mitigate this problem, coupled with additional training for equestrian animals. It still remains that the primary user for which speed is part of the use is the mountain biker. If all users were to travel no more than 4 to 5 mph, as most trails are designed to be used, the most of the interface problems would be solved. Horses react to fast moving objects with their natural instincts and can only be trained to a point. Equestrian users have asked why should a well established user group be asked to significantly retrain their animals to meet a user that has brought a completely new use to the trail system. CET&LC is committed to developing a set of safety guidelines that all users can accept as long as the users consider the innate survival reaction of the horse. We accept the need to accustom our animals to meet bikers on multi-use trails so long as the biking community will do the same in adjusting their use patterns accordingly. The enclosed draft safety

guidelines should be accepted by all agencies as part of the trail plan; otherwise, it is predictable that conflict will continue. Often, in defining the conflict problem, it seems that the emphasis is focused on equestrian "behavior" rather than a focus to resolve problems by urging all the users, (bikers, equestrians and hikers) to work together for a solution.

3. In the new update of the State Park Trail Policy there is reference made that "design, education, signage, and enforcement can be effective in controlling conflict." The CET&LC totally supports this approach, and our member organizations in California join in this support. Noted below is what was recently presented to the California State parks Director and Staff:

Design Considerations:

- a. **Develop a set of trail construction standards** that take into consideration each user's needs. Obviously, these will have compromises but will use safety as the primary objective. Some specific suggestions are:
 - **Visibility:** Switchbacks and curves need 50 ft. visual clearance on either side so users can see others.
 - **Trail width:** Wide trails can create maintenance and drainage problems. This topic includes old roads and whether they should continue to be used and be an exception. Some agencies consider wide trails as an erosion problem. Forest Service believes bikers and equestrians will often ride side by side if the trail is too wide, while many equestrians consider a 6 ft. wide trail as a minimum in order to safely pass cyclists.
 - **Trail slope:** Keep slope as low as possible (<12% if possible) for safe places for passing and visibility.
 - **Separate Trails:** Where terrain is steep, visibility is limited and safe passage is hazardous, consider having separate parallel trails, one for equestrians/hikers and one for mountain bikers.
- b. **Line of Sight:** Visibility is a major factor in the safety issue. Switchbacks and blind curves severely limit all users. Limited visibility reduces reaction time of trail users to gauge other users' speed and control so as to move out of the way where possible. Limited visibility also reduces the user seeing others approaching from behind or in front, thereby not slowing nor giving a warning call before reaching them.
- c. **Trail Width – Slope & Drop-off:** Safety on narrow trails requires that one be able to move off the trail to avoid an accident. If there is no way to go up a steep slope or if the drop-off is too extreme, one literally has nowhere to go. Blind curves and switchbacks in conjunction with narrow trails along sides of mountains with steep drop-offs and slopes increase the chances of accidents when trail users of different speeds are using the same trail.

- d. **Startle Factor:** Cyclists are relatively silent and can appear suddenly thus startling and alarming others. On narrow trails with reduced line of sight, the risk of collision between fast approaching, silent cyclists and other users rises dramatically.
- e. **Trail Grade:** This factor is directly proportional to the downhill speed of some users. There does not appear to be incidents among the users when bicyclists are going uphill. Cyclists going downhill are sometimes not able to stop in time to avoid startling horses.
- f. **Trail Surface:** Surfaces that are slippery with sand or excess scree diminish traction for most users and raise the chances of injury. When such a trail is also narrow, or has no escape route or reasonable visibility, it becomes a hazard for multiple users.
- g. **Quality of Outdoor Experience:** Safety and peace of mind should be a primary consideration in establishing policies for multi-use trails. Policies should enhance the positive experiences that outdoor recreation provides. For most, the trail experience is a relaxing endeavor. Mountain biking, requiring a vehicle, is fundamentally a different experience from hiking and horseback riding. These experiences may be compatible where there is sufficient physical trail space to allow each user a sense of freedom and safety without interference. However, when physical space diminishes on a trail, then compatibility disappears and conflict intensifies. Perceived risk becomes real for hikers and equestrians, and injury is a predictable experience. Thus, when the quality of a trail experience is markedly reduced, many will choose to not repeat it to avoid the possibility of conflict. They are then displaced or disenfranchised from enjoying a quality trail experience.

Education:

- a. The education of trail users is a key factor in the creation of a safe trail system for all to use. Not everyone understands the nature of a horse or appreciates the incredible survival skills with which they are born. We are offering to develop some suggestions for all trail users to adopt as a way of increasing the comfort level of both the trail horse and non-equestrian trail user.
- b. The education of the equestrian user is also a vital area for multi-use trails. The CET&LC is recommending to its member organizations to improve the “startle factor” training of riders and animals as part of the adjustment to becoming multi-use trail users. Several Equestrian Clubs have adopted training clinics to teach the horses and riders to meet cyclists in varying situations. This greatly improved the animal’s awareness that a cyclist is not a threat. However, even with training, “sudden appearance situations” requires an exceptional horse to handle and is not in the usual scope or ability of many equestrian trail riders (reference police and Sheriff’s Posse training and horse dropout ratio.)

Signage:

The CET&LC is recommending that California State Parks and other agencies with trail systems adopt the classic triangle yield sign as a standard for all multi-use trails. Enclosed with this letter is an example of the sign used by several other States, as well as some California park systems. It works quite well to alert users to a certain protocol and trail etiquette when meeting others on multi-use trails. Likewise, there should be good signage to make users aware of who is permitted or not on various trails.

Enforcement:

Having an enforcement process is vital for today's multitude of users. There is reference to volunteer patrols in the pending State Parks trail Policy, but no mention is made of law enforcement; and that is a critical element in maintaining a safe recreational environment. If State Parks or any other agency adopts multi-use trails over special use trails, some type of rules enforcement on the trails must be in place and will need a significantly high priority.

Conclusion:

CET&LC is recommending for all trail system user the guidelines listed above as a way to make riding, hiking and biking an enjoyable trail experience. As stated before, our intent is to support multi-use trails as long as the safety concerns and terrain conditions are addressed. **If an existing trail cannot meet these standards, then it should not be designated multi-use.** CET&LC looks forward to working with all user groups and agencies in developing safety guidelines.