



The Impacts of Llamas as Hiking Companions

An informational brochure from the International Llama Association

Since the time of the Incas, llamas have patiently carried their packs across some of the roughest terrain in the world. Today, as the effects of increased recreation on our public lands become more evident, llamas have emerged as preferred pack animals when surefootedness and minimal impact are necessary.

Well-trained llamas are easily handled. They are excellent animals for seniors or physically challenged individuals to pack, and may even be trained to accept a small child as a rider. Their size makes them easy to transport in a van or a truck. As they walk at about the same pace as a person, they make excellent hiking companions.

Social Impacts

As more and more llamas are being used as pack animals, the sight of one on the trail is becoming commonplace. With their calm disposition and gentle appearance, llamas rarely elicit a negative response in these encounters. Hikers are usually fascinated and often pause to ask handlers questions regarding their llamas.

A llama's usual reaction to strangers could be characterized as interest or curiosity. Since llamas prefer their own space, they don't crowd people, and llamas are safe pack stock to handle as they generally do not become panicky under unusual circumstances. A recent study conducted by Utah State University in cooperation with the Aldo Leopold Wilderness Research Institute found that there is little opposition to llama packing from most back country visitors. Hikers appear to consider llamas as acceptable in the back country as horses. The study showed that the greater potential for conflict exists between hikers and horseback riders rather than between hikers and llama packers. Using llamas as pack animals was perceived by hikers to cause fewer problems.

Trail Impacts

The most notable advantage of llamas is their low environmental impact. They are much smaller than most equine pack stock with the average pack llama weighing between 300-400 pounds.

A llama's foot is split into two toes, with a toenail on top and a leathery pad on the bottom. The print left in the soil is quite similar in appearance to that of an elk or deer. The design of a llama's foot allows it to spread on soft ground, thereby distributing weight over a slightly larger area. This same design allows the foot to surround and grip a surface when a llama is traveling over rocky terrain.

Llamas' legs are set well under them, allowing them to walk on extremely narrow trails; they are limited only by the width of their packs. They are capable of standing with all four feet in a small space and can easily turn around in extremely tight quarters. Another recent study conducted by the University of Montana compared the influence of horse, llama, and foot traffic to soil erosion on established trails under both wet and dry conditions. In this study, llamas were responsible for much less erosion when compared to horses, and were found to have a similar impact to that of hikers.

Llamas are often capable of carrying loads into areas too rugged for conventional pack stock. They cross water, rocks, shale slides and can easily negotiate most trails. Llamas have not been limited to carrying supplies for back country hikers. They are used by hunters to pack a wide variety of game, by fishermen to pack float tubes up to high mountain lakes, and by Forest Service employees to carry saws and other equipment for clearing and building trails in remote and nearly inaccessible areas. This adds up to a stable yet agile pack animal that can perform well in a variety of back country conditions, in a versatile and environmentally friendly way.

Off-Trail Impacts and Grazing

The off-trail effects of llamas and horses were compared in a study conducted by the Aldo Leopold Research Institute. The results confirmed that the trampling effects on native vegetation by a llama is much less than that of a horse. Llamas have few problems negotiating picket ropes and in camp they can easily be staked out where they will lie down and quietly chew their cud after eating. Moving them once or twice a day further minimizes their impact.

Llamas are preferred grazers that also browse and are modified ruminants with a three chambered stomach. In addition to grasses, they will eat leaves, twigs, weeds, and other plants. Eating a little of this and a little of that, cafeteria style, spreads out their impact on indigenous plants. Supplemental weed-free feed can be provided if needed. Llama feces are similar in appearance to those of a deer or elk. Their small pellets of dung are deposited in a dung pile that is easily scattered with a boot or shovel. Llamas require much less to drink than most pack stock. They are members of the camel family and obtain much of their water needs from what they eat. However, this does not preclude the need to offer them water daily while on the trail.

Llamas and Wildlife

Since most wild animals have never seen a llama, they are often curious rather than frightened. They may stand and watch or circle the llamas to pick up their scent. Although llamas have been victims of bear or cougar attacks, large carnivores tend to avoid llamas as aliens. Llamas will usually sound a high pitched alarm call when these predators are in the area.

Llamas are classified as "farm animals" by the U.S. Dept. of Agriculture. Llamas have been studied and found to be highly resistant to major livestock diseases. There are no cases where a llama has been suspect in the transmission of any livestock disease to other livestock or wildlife. Marked anatomic and physiologic differences between camelids and ruminants exist in many organ systems. This is not surprising since camelids and ruminants have been on separate evolutionary lines for more than 40 million years. Most parasites and diseases are species specific making the possibility of spreading disease or parasites to native wildlife extremely remote.

Llama Packers

When hiking, llamas are very quiet. They are observant and will often spot wildlife or other trail users before their human handlers do. Llama packers need to be aware of other trail users, especially horse and mule parties. Safety dictates that llamas, as the more maneuverable pack stock, should be led well off the trail, preferably downhill, when horses or mules are encountered. Horses and mules generally become accustomed to the sight of llamas after a few encounters. This safety issue is one that is shared by both llama and equine stock users. A high risk situation can be avoided with education and training of all parties.

The llamas' low impact status is appreciated and sought out by people who are environmentally concerned. Since llamas are relatively new on the North American hiking scene, owners must become educated as to their care and handling on the trail. As low impact and unobtrusive as llamas are, they still can have an adverse effect on their environment if not handled properly. The little impact that they have is easily compensated for by awareness and action on the part of their handlers. Most businesses that lease pack llamas usually do so after the client has taken a course on llama packing. Llama associations and clubs also provide educational material for new owners on the subject of llama packing.

Information in this document was prepared in part using results of studies conducted by the Aldo Leopold Wilderness Research Institute, Utah State University, University of Montana, and Ricks College.

Cole, D.N. and D.R. Spildie. 1997. *Hiker, horse and llama trampling effects on native vegetation in Montana, USA*. Submitted to Journal of Environmental Management.

H.A. Schantz. 1997. *Horse and llama forage selection and trampling impact in meadows*. M.S. thesis. University of Idaho, Moscow (in preparation).

Smith, K.K. and D.J. Blahna. 1995. *The Social Impacts and Management of Llamas as Recreational Packstock*. Ricks College, Rexburg, ID. 55 pp.

Deluca, T.H., W.A. Patterson IV, W.A. Freimund, and D.N. Cole. In press. *Influence of llamas, horses, and hikers on soil erosion from established recreation trails in western Montana*. Environmental Management.

For supporting documentation regarding this pamphlet, please contact the ILA.

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