## Appendix 1. General description of hunting bears with hounds

Hunters and CABS graduate students, technicians and undergraduate volunteers assembled at predetermined location prior to each hunt. All hounds on all hunts that CABS personnel participated in wore radio collars. When all hunters had arrived or while waiting for other hunters to arrive, early arrivers drove the roads looking for a bear track in the snow or in the road banks, or waited for a "rig dog" to start barking. A rig dog is a dog standing on the dog box in the bed of the truck or on rig boxes on the front of trucks. Rig dogs bark when they smell a bear scent as the truck is moving slowly down the road. If no tracks or scent are found, hunters take their hounds into the woods and may split up into more than one group, but carry hand-held CB's while in the woods. Some hunters stay in trucks also equipped with CB's. These hunters are typically older hunters who find it hard to walk in the woods and usually have hunted bears all of their lives. These hunters help pick up dogs, hunters, and monitor the chase by listening to the hounds' barks and the hounds' radio-collar signals. The hunters who walk in the woods have most of the hounds on leads and 1 to 3 strike hounds may be loose. Strike hounds are hounds the hunters can rely on to determine if a track (i.e. scent of a trail where a bear had walked) is a bear or not. If these hounds begin tracking (i.e. walking and barking or running and barking) the hunters may decide to release other hounds. The decision to release additional hounds is usually made by the owner(s) of the strike hounds, as they can determine how "hot" the track is by the behavior of their hound(s). Once the hounds are released, the hunters either wait and listen or they immediately follow the hounds by listening to their barks and/or radio signals. The hunters sitting in the trucks are notified by CB that the chase has started and in what direction the hounds and bear are heading. If the hounds are successful, they tree a bear and the hunters get to see a bear and how many of their hounds were involved in treeing the bear. All of the hounds that are released do not always end up at the tree. At this point, hounds are rewarded with pats and hunters take pictures. If it is the bear firearm season, hunters decide if the bear will be harvested and who will harvest the bear. Usually the decision to harvest a bear is the joint decision of the hunters at the tree and typically the hunter that harvests the bear has never harvested a bear or has seniority in the group.

However, hunts can result in hounds not smelling a track (smelling a bear that has crossed the road, trail, etc.). Hounds may strike a track, but the bear may not tree, especially if a track is old or hounds are inexperienced. For a chase to be successful, hounds must first locate a track. Once they cross the track, the hounds must run in the right direction on the track. Hounds track by scent, and hounds can run backwards on a track (back tracking). A track has to be visible in the mud, dirt, snow, or leaves, for the hunter to know if their hounds are going in the right direction. If the hounds are on the back track, the hunters have to wait for the hounds to come back and then start the hounds in the right direction or try to catch up with the hounds, which is often impossible.

Hounds may also be confused by other hounds if hunters turn too many hounds loose. Inexperienced and young hounds may start tracking a deer or other animal and may cause other hounds to follow them. Hunters may also use their hounds to hunt raccoons and these hounds may run on any animal track they smell. Tracks can also be "cold", i.e. old, and hounds may come back to the hunters, walk the track, or run the track and never "jump" the bear. A bear is "jumped" when the hounds are close enough for the bear to hear the hounds and the bear begins running. A bear is not necessarily chased when the hounds are released on a track, but only when the hounds come close enough to the bear to "jump" it.

Most hunts begin at day light and end late in the evening when the hounds are picked up. A typical hunt consists of a lot of walking and hunters usually spend a great deal of time looking for dogs. Radio collaring hounds primarily allows hunters to locate hounds when the chase ends. On mountainous terrain and on windy days it can be hard to locate hounds even with the aid of radio collars. If the hounds are not collared they may not be found for days and will only be found if they cross a road and can be picked up.