

2025 Iron Forge District Merit Badge College

Scouts will have the opportunity to work towards 1 or 2 merit badges at the college. All merit badges that list prerequisites will need to be completed BEFORE the day of the college. Even though there is a charge for the college, there is no guarantee that you will complete the merit badge- a partial completion is acceptable, but it is up to the scout to find a counselor to complete the work. Each scout must complete each requirement as written. Classes are being led by certified merit badge counselors.

BRING A SIGNED BLUE CARD FOR EACH MERIT BADGE YOU ARE WORKING ON

Lunch will NOT be provided. All attendees will need to bring their own.

Units who would like to camp for the weekend of the college will need to reserve sites through a separate registration in Tentaroo.

Parents are welcome to stay during the college but will need to sign in and out so we know who is on the camp property.

Prerequisites List

Animal Science

AM sessions

Session size: 15

Prerequisites:

3. Draw models of the digestive tracts of ruminants, horses, pigs, and poultry. Explain how the differences in structure and function among these types of digestive tracts affect the nutritional management of these species.

4. Select one type of animal- beef cow, dairy cow, horse, sheep, goat, or hog, or a poultry flock – and tell how you would properly manage it. Include in your discussion nutritional (feeding) concerns, housing, disease prevention, waste control/removal, breeding programs, and biosecurity as appropriate.

6. Complete ONE of the following options:

Beef Cattle Option

(a) Visit a farm or ranch where beef cattle are produced under any of these systems:

1. Feeding market cattle for harvest
2. Cow/calf operation, producing cattle for sale to commercial feeders
3. Producing purebred cattle for sale as breeding stock to others

Talk with the operator to learn how the cattle were handled, fed, weighed, and shipped. Describe what you saw and explain what you learned. If you cannot visit a cattle ranch or farm, view a video from a breed association, or research the internet (with your parent or guardian's permission) for information on beef cattle production. Tell about your findings.

(b) Sketch a plan of a feedlot to include its forage and grain storage facilities, and loading chute for 30 or more fattening steers; or sketch a corral plan with cutting and loading chutes for handling 50 or more beef cows and their calves at one time.

(c) Make a sketch showing the principal wholesale and retail cuts of beef. Tell about the U.S. Department of Agriculture (USDA) dual grading system of beef. Tell the basis of each grade in each system.

(d) Define the following terms: bull, steer, bullock, cow, heifer, freemartin, heiferette, calf.

Dairy Option

(a) Tell how a cow or a goat converts forage and grain into milk. Explain the differences in feeds typically used for dairy cows versus those fed to beef cows.

(b) Make a chart showing the components in cow's milk or goat's milk. Chart the amount of each component.

(c) Explain the requirements for producing grade A milk. Tell how and why milk is pasteurized.

(d) Tell about the kinds of equipment used for milking and the sanitation standards that must be met on dairy farms.

(e) Define the following terms: bull, cow, steer, heifer, springer; buck, doe, kid.

(f) Visit a dairy farm or a milk processing plant. Describe what you saw and explain what you learned. If you cannot visit a dairy farm or processing plant, view a video from a breed or dairy association, or research the internet (with your

parent or guardian's permission) for information on dairying. Tell about your findings.

Horse Option

(a) Make a sketch of a useful saddle horse barn and exercise yard.

(b) Tell about the history of the horse and the benefits it has brought to people. Using the four breeds of horses you chose in requirement 1, discuss the different special uses of each breed.

(c) Define the following terms: mare, stallion, gelding, foal, colt, filly; mustang, quarter horse, draft horse, pacer, trotter; pinto, calico, palomino, roan, overo, tobiano.

(d) Visit a horse farm. Describe what you saw and explain what you learned. If you cannot visit a horse farm, view a video from a breed association, or research the internet (with your parent or guardian's permission) for information on horses. Tell about your findings.

(e) Outline the proper feeding of a horse doing light work. Explain why the amount and kind of feed will change according to the kind of horse and the work it does. Describe what colic is, what can cause it, and its symptoms.

Sheep or Goat Option (choose one and complete the following based upon the choice)

(a) Make a sketch of a live lamb or goat. Show the location of the various wholesale and retail cuts.

(b) Discuss how wools are sorted and graded.

(c) List products that can be made from the milk.

(d) Based on your choice, do ONE of the following:

(1) Raise a lamb or goat from weaning to market weight. Keep records of feed intake, weight gains, medication, vaccination, and mortality. Present your records to your counselor for review.

(2) Visit a farm or ranch where sheep or goats are raised. Describe what you saw and explain what you learned. If you cannot visit a sheep or goat farm or ranch, view a video from a breed association, or research the Internet (with your parent's permission) for information on sheep or goats. Tell about your findings.

(e) Define the following terms for a sheep (wether, ewe, ram, lamb) OR a goat (doe, nanny, kid, buck, billy).

Hog Option

- (a) Make a sketch showing the principal wholesale and retail cuts of pork. Tell about the recommended USDA grades of pork. Tell the basis for each grade.
- (b) Outline in writing the proper feeding programs used from the breeding of a gilt or sow through the weaning of the litter. Discuss the feeding programs for the growth and finishing periods.
- (c) Do ONE of the following:
 - (1) Raise a feeder pig from weaning to market weight. Keep records of feed intake, weight gains, medication, vaccination, and mortality. Present your records to your counselor for review.
 - (2) Visit a farm where hogs are produced, or visit a packing plant handling hogs. Describe what you saw and explain what you learned. If you cannot visit a hog production unit or packing plant, view a video from a packer or processor, or research the internet (with your parent or guardian's permission) for information on hogs. Tell about your findings.
- (d) Define the following terms: gilt, sow, barrow, boar.

Avian Option

- (a) Make a sketch of a layer house or broiler house showing nests, roosts, feeders, waterers, and means of ventilation. Explain how insulation, ventilation, temperature controls, automatic lights, and other environmental controls are used to protect birds from heat, cold, and bad weather. Explain the importance of light for egg production.
- (b) Explain why overcrowding is dangerous for poultry flocks.
- (c) Tell about the grading of eggs. Describe the classes of chicken meat.
- (d) Do ONE of the following:
 - (1) Manage an egg-producing flock for five months. Keep records of feed purchased, eggs sold, medication, vaccination, and mortality. Present your records to your counselor for review.
 - (2) Raise five chickens from hatching. Keep records of feed intake, weight gains, medication, vaccination, and mortality. Present your records to your counselor for review.
 - (3) Visit a commercial avian production facility. Describe what you saw and explain what you learned. If you cannot visit a commercial facility, view a video from a poultry association, or research the Internet (with your parent's permission) for information on poultry production. Tell about your findings.
- (e) Define the following terms: chick, pullet, hen, cockerel, cock, capon.

7. Find out about three career opportunities in animal science. Pick one and find out the education, training, and experience required for this profession. Discuss this with your counselor, and explain why this profession might interest you.

Archery

All day session

Session size: 10

Prerequisites: None

Note: This merit badge has an additional expense to cover the cost of the arrow kit.

Camping

AM and PM sessions

Session size: 10

Prerequisites:

3. Make a written plan* for an overnight trek and show how to get to your camping spot by using a topographical map and one of the following: (a) Compass (b) GPS receiver** (c) Smartphone with a GPS app**

4a. Make a duty roster showing how your patrol is organized for an actual overnight campout. List assignments for each member.

4b. Help a Scout patrol or Webelos Scout unit in your area prepare for an actual campout, including creating the duty roster, menu planning, equipment needs, general planning, and setting up camp.

5e. Present yourself to your Scoutmaster with your pack for inspection. Be correctly clothed and equipped for an overnight campout.

8c. Prepare a camp menu. Explain how the menu would differ from a menu for a backpacking or float trip. Give recipes and make a food list for your patrol. Plan two breakfasts, three lunches, and two suppers. Discuss how to protect your food against bad weather, animals, and contamination.

8d. While camping in the outdoors, cook at least one breakfast, one lunch, and one dinner for your patrol from the meals you have planned for requirement 8c. At least one of those meals must be a trail meal requiring the use of a lightweight stove.

9. Show experience in camping by doing the following:

(a) Camp for at least 20 nights at designated Scouting activities or events. One long-term camping experience of up to six consecutive nights toward this requirement. Two nights may be counted toward the total for each additional long-term camping trip. Each night must be spent either under the sky, in a tent you have pitched yourself (if a tent is provided and already set up, you do not need to pitch your own), in a hammock that is safely strung outdoors, in a lean-to, or other three-sided shelter with an open front. Nights spent in indoor lock-in events, cabin camping, hotel stays, or other covered accommodations do not count toward the 20 nights.

(b) On any of these camping experiences, you must do TWO of the following, only with proper preparation and under qualified supervision. (1) Hike up a mountain, gaining at least 1,000 vertical feet. (2) Backpack, snowshoe, or cross-country ski for at least 4 miles. (3) Take a bike trip of at least 15 miles or at least four hours. (4) Take a nonmotorized trip on the water of at least four hours or 5 miles. (5) Plan and carry out an overnight snow camping experience. (6) Rappel down a rappel route of 30 feet or more.

(c) On any of these camping experiences, perform a conservation project approved by the landowner or land managing agency. This can be done alone or with others.

Citizenship in the Community

AM and PM sessions

Session size: 15

Prerequisites:

3. Do the following:

(a) Attend an in-person meeting of your city, town, or county council or school board, local court session; OR another state or local governmental meeting approved in advance by your counselor.

(b) Choose one of the issues discussed at the meeting where a difference of opinions was expressed, and explain to your counselor why you agree with one opinion more than you do another one.

4. Choose an issue that is important to the citizens of your community; then do the following:

(a) Find out which branch of local government is responsible for this issue.

(b) With your counselor's and a parent or guardian's approval, interview one person from the branch of government you identified in requirement 4a. Ask what is being done about this issue and how young people can help.

(c) Share what you have learned with your counselor.

5. With the approval of your counselor and a parent or guardian, watch a movie that shows how the actions of one individual or group of individuals can have a positive effect on a community. Discuss with your counselor what you learned from the movie about what it means to be a valuable and concerned member of the community.

7. Do the following:

(a) Identify three charitable organizations outside of Scouting that interest you and bring people in your community together to work for the good of your community.

(b) Pick ONE of the organizations you chose for requirement 7a. Using a variety of resources (including newspapers, fliers, and other literature, the Internet, volunteers, and employees of the organization), find out more about this organization.

(c) With your counselor's and your parent or guardian's approval, contact the organization you chose for requirement 7b, and find out what young people can do to help. While working on this merit badge, volunteer at least eight hours of your time for the organization. After your volunteer experience is over, discuss what you have learned with your counselor.

8. Develop a public presentation (such as a video, slide show, speech, digital presentation, or photo exhibit) about important and unique aspects of your community. Include the information about the history, cultures, and ethnic groups of your community; its best features and popular places where people gather; and the challenges it faces. Stage your presentation in front of your counselor or group, such as your patrol or a class at school.

Citizenship in the World

AM and PM sessions

Session size: 15

Prerequisites:

7. Do TWO of the following (with your parent or guardian's permission) and share with your counselor what you have learned:

(a) Visit the web site of the U.S. State Department. Learn more about an issue you find interesting that is discussed on this web site.

(b) Visit the web site of an international news organization or foreign government, OR examine a foreign newspaper available at your local library, bookstore, or newsstand. Find a news story about a human right realized in the United States that is not recognized in another country.

(c) Visit with a student or Scout from another country and discuss the typical values, holidays, ethnic foods, and traditions practiced or enjoyed there.

(d) Attend a world Scout jamboree,

(e) Participate in or attend an international event in your area, such as ethnic festival, concert, or play.

Collections

AM and PM sessions

Session size: 10

Prerequisites: None

Note: Please bring your collection with you. Stamp and coin collecting are excluded from eligibility for this merit badge.

Cooking

AM and PM sessions

Session size: 15

Prerequisites:

2c. Track your daily level of activity and your daily caloric need based on your activity for five days. Then, based on the My Plate food guide, discuss with your counselor an appropriate meal plan for yourself for one day.

Note: The meals prepared for Cooking merit badge requirements 4, 5, and 6 will count only toward fulfilling those requirements and will not count toward rank advancement or other merit badges. Meals prepared for rank advancement or other merit badges may not count toward the Cooking merit badge. You must not repeat any menus for meals actually prepared or cooked in requirements 4, 5, and 6.

4. Cooking at home. Using the MyPlate food guide or the current USDA nutrition model, plan menus for three full days of meals (three breakfasts, three lunches, and three dinners) plus one dessert. Your menus should include enough to feed yourself and at least one adult, keeping in mind any special needs (such as food allergies) and how you keep your foods safe and free from cross-contamination. List the equipment and utensils needed to prepare and serve these meals.

Then do the following:

- (a) Find recipes for each meal. Create a shopping list for your meals showing the amount of food needed to prepare for the number of people you will serve. Determine the cost for each meal.
- (b) Share and discuss your meal plan and shopping list with your counselor.
- (c) Using at least five of the 10 cooking methods from requirement 3, prepare and serve yourself and at least one adult (parent, family member, guardian, or other responsible adult) one breakfast, one lunch, one dinner, and one dessert from the meals you planned.*
- (d) Time your cooking to have each meal ready to serve at the proper time. Have an adult verify the preparation of the meal to your counselor.
- (e) After each meal, ask a person you served to evaluate the meal on presentation and taste, then evaluate your own meal. Discuss what you learned with your counselor, including any adjustments that could have improved or enhanced your meals. Tell how planning and preparation help ensure a successful meal.

5. Camp cooking. Do the following:

- (a) Using the MyPlate food guide or the current USDA nutrition model, plan a menu that includes four meals, one snack, and one dessert for your patrol (or a similar size group of up to eight youth, including you) on a camping trip. These four meals must include two breakfasts, one lunch, and one dinner. Additionally, you must plan one snack and one dessert. Your menus should include enough food for each person, keeping in mind any special needs (such as food allergies) and how you keep your foods safe and free from cross-contamination. List the equipment and utensils needed to prepare and serve these meals.
- (b) Find or create recipes for the four meals, the snack, and the dessert you have planned. Adjust menu items in the recipes for the number to be served. Create a shopping list and budget to determine the per-person cost.
- (c) Share and discuss your menu plans and shopping list with your counselor.
- (d) In the outdoors, using your menu plans and recipes for this requirement, cook two of the four meals you planned using either a camp stove OR backpack stove. Use a skillet over campfire coals OR a Dutch oven for the third meal, and cook the fourth meal in a foil pack OR on a skewer. Serve all of these meals to your patrol or a group of youth.**
- (e) In the outdoors, using your menu plans and recipes for this requirement, cook two of the four meals you planned using either a camp stove OR backpack stove.

Use a skillet over campfire coals OR a Dutch oven for the third meal, and cook the fourth meal in a foil pack OR on a skewer. Serve all of these meals to your patrol or a group of youth.**

(f) After each meal, have those you served evaluate the meal on presentation and taste, and then evaluate your own meal. Discuss what you learned with your counselor, including any adjustments that could have improved or enhanced your meals. Tell how planning and preparation help ensure successful outdoor cooking.

(g) Lead the clean-up of equipment, utensils, and the cooking site thoroughly after each meal. Properly store or dispose unused ingredients, leftover food, dishwater and garbage.

(h) Discuss how you followed the Outdoor Code and no-trace principles when preparing your meals.

6. Trail and backpacking meals. Do the following:

(a) Using the MyPlate food guide or the current USDA nutrition model, plan a meal for trail hiking or backpacking that includes one breakfast, one lunch, one dinner, and one snack. These meals must consider weight, not require refrigeration and are to be consumed by three to five people (including you). List the equipment and utensils needed to prepare and serve these meals.

(b) Create a shopping list for your meals, showing the amount of food needed to prepare and serve each meal, and the cost for each meal.

(c) Share and discuss your meal plan and shopping list with your counselor. Your plan must include how to repackage foods for your hike or backpacking trip to eliminate as much bulk, weight, and garbage as possible.

(d) While on a trail hike or backpacking trip, prepare and serve two meals and a snack from the menu planned for this requirement. At least one of those meals must be cooked over a fire, or an approved trail stove (with proper supervision).**

(e) After each meal, have those you served evaluate the meal on presentation and taste, then evaluate your own meal. Discuss what you learned with your counselor, including any adjustments that could have improved or enhanced your meals. Tell how planning and preparation help ensure successful trail hiking or backpacking meals.

(f) Explain to your counselor how you should divide the food and cooking supplies among the patrol in order to share the load. Discuss how to properly clean the cooking area and store your food to protect it from animals.

Cycling

AM and PM sessions

Session size: 10

Post Work:

6. Using the BSA buddy system, complete all of the requirements for ONE of the following options: road biking OR mountain biking.*

Option A: Road Biking

(a) Take a road test with your counselor and demonstrate the following:

- (1) On an urban street with light traffic, properly execute a left turn from the center of the street; also demonstrate an alternate left-turn technique used during periods of heavy traffic.
- (2) Properly execute a right turn.
- (3) Demonstrate appropriate actions at a right-turn-only lane when you are continuing straight.
- (4) Show proper curbside and road-edge riding. Show how to ride safely along a row of parked cars.
- (5) Cross railroad tracks properly.

(b) Avoiding main highways, take two rides of 10 miles each, two rides of 15 miles each, and two rides of 25 miles each. You must make a report of the rides taken. List dates for the routes traveled, and interesting things seen on the ride.

(c) After completing requirement 2 for the road biking option, do ONE of the following:

- (1) Lay out on a road map a 50-mile trip. Stay away from main highways. Using your map, make this ride in eight hours or less.
- (2) Participate in an organized bike tour of at least 50 miles. Make this ride in eight hours or less. Afterward, use the tour's cue sheet to make a map of the ride.

Option B: Mountain Biking

(a) Demonstrate the following mountain bike handling skills to your counselor:

- (1) Neutral position, ready position, bike body separation (side to side, and forward and back), and body positioning for cornering
- (2) Show shifting skills as applicable to climbs and obstacles.
- (3) Show proper technique for riding up (seated, crouched, and standing) and down hills.

- (b) Take a trail ride with your counselor and demonstrate the following:
- (1) Show proper trail etiquette to hikers and other cyclists, including when to yield the right-of-way.
 - (2) Demonstrate how to correctly cross an obstacle by either going over the obstacle on your bike or dismounting your bike and crossing over or around the obstacle
 - (3) Cross rocks, gravel, and roots properly
- (c) Describe the rules of trail riding, including how to know when a trail is unsuitable for riding.
- (d) On trails approved by your counselor, take two rides of 2 miles each, two rides of 5 miles each, and two rides of 8 miles each. You must make a report of the rides taken. List dates for the routes traveled, and interesting things seen.
- (e) After fulfilling the previous requirement, lay out on a trail map a 22-mile trip. You may include multiple trail systems, if needed. Stay away from main highways. Using your map, make this ride in six hours.

Dog Care

PM sessions

Session size: 15

Prerequisites:

4. For two months, keep and care for your dog.* Maintain a log of your activities during this period that includes these items: feeding schedule, types of food used, amount fed, exercise periods, training schedule, a weekly body weight record, grooming and bathing schedules, veterinary care, if necessary, and costs. Also include a brief description of the type of housing/shelter arrangements you have for your dog.

8. Visit a veterinary hospital or an animal shelter and give a report about your visit to your counselor.

10. Do ONE of the following:

(a) Identify three career opportunities that would use skills and knowledge in working with dogs. Pick one and research the training, education, certification requirements, experience, and expenses associated with entering the field. Research the prospects for employment, starting salary, advancement opportunities and career goals associated with this career. Discuss what you learned with your counselor and whether you might be interested in this career.

(b) Identify how you might use the skills and knowledge in working with dogs to pursue a personal hobby and/or healthy lifestyle. Research the additional training required,

expenses, and affiliation with organizations that would help you maximize the enjoyment and benefit you might gain from it. Discuss what you learned with your counselor and share what short-term and long-term goals you might have if you pursued this.

Emergency Preparedness

AM and PM sessions

Session size: 12

Prerequisites:

1. Bring proof of completed First Aid Merit Badge
2. C. Meet with and teach your family how to get or build a kit, make a plan, and be informed for the situations on the chart you created for requirement 2b. Complete a family plan. Then meet with your counselor and report on your family meeting, discuss their responses, and share your family plan.
6. Be prepared with your local information for discussion on the following:
Do the following:
 - a. Describe the National Incident Management System (NIMS) and the Incident Command System (ICS)
 - b. Identify the local government or community agencies that normally handle and prepare for emergency services similar to those of the NIMS or ICS. Explain to your counselor
 1. How the NIMS/ICS can assist a Boy Scout troop when responding in a disaster
 2. How a group of Scouts could volunteer to help in the event of these types of emergencies.
 - c. Find out who is your community's emergency management director and learn what this person does to prevent, protect, mitigate, respond to, and recover from emergency situations in your community. Discuss this information with your counselor, utilizing the information you learned from requirement 2b
7. Do the following:
 - a. Take part in an emergency service project, either a real one or a practice drill, with a Scouting unit or a community agency.
 - b. Prepare a written plan for mobilizing your troop when needed to do emergency service. If there is already a plan, explain it. Tell your part in making it work.

8 b. Bring along evidence of your pack. Pictures or actual pack. Prepare a personal emergency service pack for a mobilization call. Prepare a family kit (suitcase or waterproof box) for use by your family in case an emergency evacuation is needed. Explain the needs and uses of the contents.

9. Do ONE of the following:

- a. Using a safety checklist approved by your counselor, inspect your home for potential hazards. Explain the hazards you find and how they can be corrected.
- b. Review or develop a plan of escape for your family in case of fire in your home.
- c. Develop an accident prevention program for five family activities outside the home (such as taking a picnic or seeing a movie) that includes an analysis of possible hazards, a proposed plan to correct those hazards, and the reasons for the corrections you propose.

Environmental Science

All Day Session

Session size: 15

Prerequisites:

2. Ecology. Do the following and discuss with your counselor:

- (a) Choose an area approved by your counselor and observe (sight, sound, and smell) its ecosystem over a two-day period.
- (b) Make notes about the living, nonliving (e.g. rocks) and formerly living components. Include information about interactions among the components, including the food chain, predators, native species, and invasive species) and identify how human activities have affected the ecosystem.

6. Rare, Threatened, or Endangered Species. Do ONE of the following and discuss with your counselor:

- (a) Do research on one endangered species found in your state. Learn about its natural habitat, why it is endangered, what is being done to preserve it, and how many individual species are left in the wild. Prepare a 100-word report about the species and include a drawing or photo. Present your report to your patrol or troop.
- (b) Do research on one species that was endangered or threatened but that has now recovered. Learn about how the species recovered, and what its new status is. Prepare a 100-word report on the species and include a drawing or photo. Present your report to your patrol or troop.

(c) With your parent or guardian and counselor's approval, work with a natural resource professional to identify a completed project that has been designed to improve the habitat for a threatened or endangered species in your area. Visit the site and report on what you saw to your patrol or troop.

7. Pollution Prevention, Resource Recovery, and Conservation. Do ONE of the following and discuss with your counselor:

(a) Determine five ways to conserve resources or use resources more efficiently in your home, school, or camp. Practice at least two of these methods for at least one week.

(b) Explain Resource Recovery and why it is important to reduce pollution. Collect samples or take photos of ten items that can demonstrate the principle of Reduce, Reuse, Recycle. Explain your collection, how these materials are currently handled, and potential improvements.

(c) Identify five items in your household that will become hazardous waste. Explain how they should be properly stored, what special care is needed for disposal, and proper disposal options available in your area.

11. Identify three career opportunities that would use skills and knowledge in the environmental science field. Pick one and research the training, education, certification requirements, experience, and expenses associated with entering the field. Research the prospects for employment, starting salary, advancement opportunities and career goals associated with this career. Discuss what you learned with your counselor and whether you might be interested in this career.

Fly Fishing

AM and PM sessions

Session size: 8

Prerequisites: None

Note: Scouts are encouraged to bring their own fly rods if they have them.

Geology

AM and PM sessions

Session size: 15

Prerequisites: None

Golf (Disc)

AM and PM sessions

Session size: 15

Prerequisites: None

Photography

AM and PM sessions

Session size: 15

Prerequisites: None

Equipment needed: Each Scout will need to bring a camera or cell phone to take pictures.

Pioneering

All day session

Session size: 10

Prerequisites: None

Radio

AM and PM sessions

Session size: 12

Prerequisites:

7. Visit a radio installation (an amateur radio station, broadcast station, or public service communications center, for example) approved in advance by your counselor. Discuss what types of equipment you saw in use, how it was used, what types of licenses are required to operate and maintain the equipment, and the purpose of the station.

8. Find out about three career opportunities in radio. Pick one and find out the education, training, and experience required for this profession. Discuss this with your counselor, and explain why this profession might interest you.

Reptile and Amphibian Study

AM and PM sessions

Session size: 15

Prerequisites:

8. Do ONE of the following:

(a) Maintain one or more reptiles or amphibians for at least a month. Record food accepted, eating methods, changes in coloration, shedding of skins, and general habits; or keep the eggs of a reptile from the time of laying until hatching; or keep the eggs of an amphibian from the time of laying until their transformation into tadpoles (frogs) or larvae (salamanders).

(b) Choose a reptile or amphibian that you can observe at a local zoo, aquarium, nature center, or other such exhibit (such as your classroom or school). Study the specimen weekly for a period of three months. At each visit, sketch the specimen in its captive habitat and note any changes in its coloration, shedding of skins, and general habits and behavior. Discuss with your counselor how the animal you observed was cared for to include its housing and habitat, how the lighting, temperature, and humidity were maintained, and any veterinary care requirements. Find out, either from information you locate on your own or by talking to the caretaker, what this species eats and what are its native habitat and home range, preferred climate, average life expectancy, and natural predators. Also identify any human-caused threats to its population and any laws that protect the species and its habitat. After the observation period, share what you have learned with your counselor.

Rifle Shooting

All day session

Session size: 10

Prerequisites: None

Note: This merit badge has an additional expense to cover the cost of ammo.

Search and Rescue

All day session

Session size: 10

Prerequisites: None

Truck Transportation

AM and PM sessions

Session size: 15

Prerequisites:

4. Visit a truck terminal and complete items 4a through 4e. After your visit, share what you have learned with your counselor.
 - a. Find out what kind of maintenance program the company follows to help keep its fleet, drivers, and the roadway safe.
 - b. Find out how dispatchers maintain communication with drivers on the road.
 - c. Talk with a professional truck driver about safety. Learn about the truck driver's rules of the road for safe driving. List five safe-driving rules every professional truck driver must follow.
 - d. Review the driver's log and find out what kind of information the log contains.
 - e. Learn about important federal regulations that help ensure public safety.

10. Learn about opportunities in the field of truck transportation. Choose one career in which you are interested and discuss with your counselor the major responsibilities of that position and the qualifications, education, and training such a position requires.