

ZOO REPORT INSTRUCTIONS Brookfield Zoo

SUMMARY OF INSTRUCTIONS: What you have to do at the zoo can be summarized as follows; you must see the detailed instructions on the next pages for more info about each step:

BE PREPARED: STUDY instructions and readings **BEFORE** you go; **Allow 4 to 5 hours** at the zoo.

You MUST bring and use an audio tape recorder; practice using it first.

You must bring the Rowe book. Bring binoculars if you can.

Be serious about what you are doing -- this is not a recreational event.

RECORD time, date and weather when you arrive, and the time of day and length of time during which you make each observation.

When you arrive at the zoo get a map and go to Tropic World; all your observations will be made there.

PART 1: Baboon Island. Just to the south of the Tropic World. Observation (unstructured) of the baboons.

PART 2: Room one (South America)

A. Identify all the species of primates using the Rowe picture book, and describe each

B. Compare the cebid monkeys with the marmosets & tamarins there; be sure to observe their **feeding and locomotion**

C. Observe the odd spider monkey there

PART 3: Room two (Asia)

A. List the species, describe each

B. Do a focal animal study of one individual for 20 minutes

C. The tree shrew

PART 4: Room three (Africa)

A. Identify & describe the species of monkeys

B. Do a 30 minute scan survey of gorilla social behavior

C. Write a conclusion from your gorilla observation

MOST OF YOUR WRITTEN REPORT SHOULD CONSIST OF YOUR OBSERVATIONS AT THE ZOO OF THE ANIMALS THEMSELVES; ANYTHING YOU ADD FROM BOOKS, LECTURES, INTERNET MUST BE CLEARLY MARKED AS SUCH.

The primary criteria for grading your written reports are the completeness, quality and detail of your descriptions and observations (can I visualize the animals and activities you are talking about?) and how well you followed the instructions; clarity of writing, use of formal English grammar, and correct spelling are expected. Neatness and appearance count, so that typing the report and organizing the material both help your grade, but photos and other inclusions (such as Xeroxed pictures and website printouts) are optional and add very few points. I caution you: **DON'T STUDY AN OLD ZOO REPORT;** these instructions are quite different from any previous ones. **You must include the full Latin species name of all the animals you observe.**

Before you head for the zoo, be sure to read the entire instructions, including the preliminary stuff and the “how to write it” up stuff.

Written reports are DUE Thursday October 8, 2009. You must hand in your tapes and field notes with your report. Do not put your name anywhere on your report or tapes, use your student ID number instead so I will not know whose report I am reading. Put everything in a large brown envelope with your ID # on the outside.

Primates class: you must go to Brookfield Zoo

Brookfield Zoo is located at First Avenue between Ogden Avenue and 31st Street in Brookfield, Illinois, just 14 miles west of downtown Chicago. Admission is \$ 12 per person, and parking is \$ 8 per car. The zoo is open every day from 10 am to 5 pm, and until 6 pm on weekends, but Tropic World closes about an hour earlier. Go to <http://www.brookfieldzoo.org> or call (708) 485-0263 for more info.

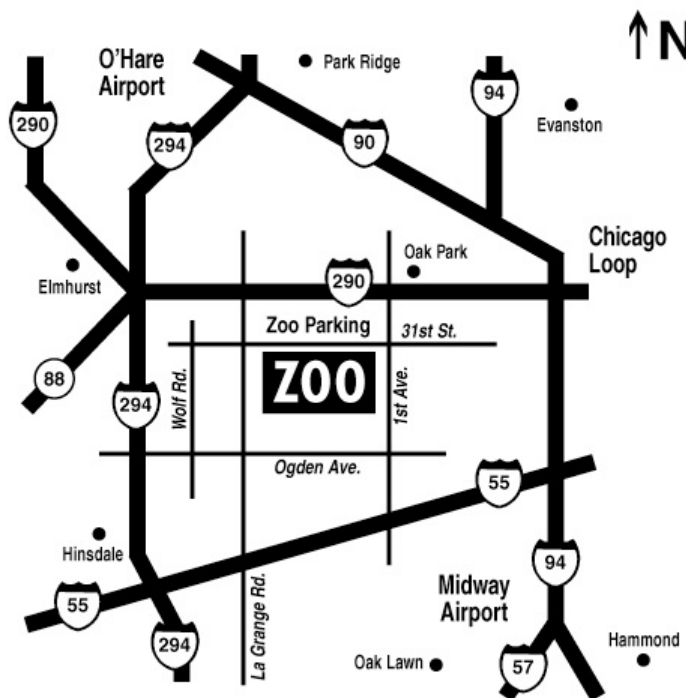
DRIVING DIRECTIONS: The usual way to drive the 30 miles from Indiana to Brookfield Zoo is to take the Tristate tollway (I-294) around Chicago, or go through Chicago to go to the western suburbs. Which is faster probably depends on the traffic conditions; you can listen to am radio 780 for traffic reports every 10 minutes, or check Google maps traffic or your GPS.

1) The Tristate tollway route: enter Illinois on I-80/94, and follow I-80 until I-294 splits off heading for Wisconsin; follow I-294 to I-55, and follow I-55 northeast to Illinois route 171; take 171 north, and it becomes First Avenue. Signs along First Ave will direct you to the zoo and parking.

2) The Chicago route: take either the Indiana Tollway I-90 into Illinois and follow I-90 to downtown Chicago, or take I-80/94 into Illinois and follow I-94 north/west (Bishop Ford/Dan Ryan) to downtown Chicago; either way, from I-90/94, take I-290 (Eisenhower expressway) west from downtown for about ten miles to First Ave; go south on First Ave and follow the signs to the zoo.

3) Another Chicago route: as you are heading for downtown Chicago on I-90/94 (Dan Ryan Expressway), you can take the exit for I-55 (Stevenson Expressway) southwest and follow that to Illinois route 171 north, which becomes First Ave. Follow the signs to the zoo.

Public Transportation: You can get to the zoo without a car by taking a South Shore Line train to Randolph Street Station in Chicago; South Shore trains leave both Gary and Chicago every two hours all weekend starting at 6 am, more frequent on weekdays. From Randolph station you must then take a bus (southbound route # 151 Sheridan) or cab (or walk) a mile to the Metra Union Station at Canal and Jackson. Then take the Metra Burlington Northern route train from Union Station to the Zoo stop; those trains run every two hours all weekend, starting at 8:30 am from Chicago, and starting at 1 pm coming back. They run more often on weekdays. There is a weekend excursion fare. Call (219) 836-7000 for route, schedule, and fare info. Or visit <http://metrarail.com>



THE PURPOSE of your visit to the zoo is to acquire a general familiarity with the Order Primates as well as to learn OBSERVATION, the principal research method of anthropology and all other sciences as well. Going to the zoo sooner will better prepare you for the class sessions and give you more time to write up the report, but waiting longer will give you more time to study the books and become fully prepared for the zoo observations, so it is up to you. Take notes by speaking into the tape recorder about what you see, as well as getting the names of the primates and other info from the signs by reading them aloud. You may want to write down the species names to get the spelling right. You can bring picture books to help identify primates, especially the *Monkeys & Apes* book. All of you should be able to tell primates from other animals, and the four kinds of primates from each other.

Be familiar with the FOUR major groups of non-human primates before you go to the zoo: Prosimians (and the similar tarsiers), New World Monkeys, Old World Monkeys, and Apes.

IN ANY CASE DON'T GO TO THE ZOO UNTIL you have studied all of the first three weeks of reading assignments about primates. Don't forget to carefully read all of this instruction booklet before you go, especially the part at the end about writing it up. If you go unprepared, you won't come back with enough observations to write a good report. Get to the zoo early enough in the day so that you won't feel rushed and thus can enjoy yourself. The primates are now fed several times a day, so you can see some activity around these times; they tend to nap out for a while after eating, so you may have to come back later in the day to see those particular animals active. But they don't feed all the species at once, so you can observe others at that time. When you get tired and/or hungry yourself, TAKE A BREAK and your energy will return — the most common flaw I see in papers is that many start out fine at the first houses, but they have very little on the last part because the students were getting pooped out. In any case, if you become tired, do rest, eat, or do something else for a few minutes. Another hint: if you bring family members or a date or friend along, be sure they will leave you alone so you can get your work done; better yet, put them to work taking pictures that you can look at as you write your report.

WHAT TO BRING: Money for parking, admission, and food, and some extra just in case; binoculars are very useful, bring them if you can; a Chicago area map in case you get lost; lunch and snacks if you don't want to be caught without food or pay zoo prices; paper and pencils; a watch; **you must bring the Rowe book, too. I also require that you bring an audio recorder, tape or digital**, as it is the only practical way to record your observations; you can take "notes" while keeping your eyes on the animals and even read the signs into the mike. Tape recorders that use full size cassettes (music size) work better than ones that use microcassettes. If there is a choice, use the *faster* tape speed; it uses up more tape, but the playback will be clearer to hear. If you don't have your own portable tape recorder, we have set it up so that you can borrow one from the IUN Department of Sociology & Anthropology Main office in Lindenwood 214' bring a \$20 cash deposit before 5 pm any day Monday thru Friday and show Kristie your student ID, and she will issue you one, and refund your \$20 when you return it. Be sure to test the recorder and practice with it before you go to the zoo so you know how it works, and bring lots of spare batteries and tapes; also replay the first few things you record while at the zoo to be sure you are using it properly.

Learning to use the audio tape recorder is part of the assignment; reports submitted without sufficient data on tape lose lots of points! If you want to bring a camera, be forewarned: DON'T EVER USE FLASH; it is very upsetting to the animals. I suggest a digital camera, or a 35 mm camera with a fast film (high ASA number like 400 or 1000), a Zoom lens, and a steady hand (or if you bring a friend, bring a photographer type). Digital cameras work best in these conditions. But do

remember to spend most of your time on observations, not photography, as pictures are not required and don't add many points to your paper. Some students who have the skills have used a video camera with great success, especially for viewing locomotion; but you still have to record your spoken observations, too, so talk into the mike while shooting — then you won't need an audio tape recorder at all. If someone else is doing the video for you, you will still need to record your notes on an audio recorder. It is worth the trouble to use a video camcorder **ONLY IF**: 1.) you are already very familiar with using it (otherwise you will waste too much time), and 2.) you also go back over the tape at home to "re-observe". **You must hand in all audio and video tapes, CD's, DVD's and field notes with your paper.**

SPECIFIC INSTRUCTIONS: The assignment has specific instructions; these instructions may seem overly long, but they will tell you exactly what to do, along with some helpful hints gained from my 30 years of experience in sending students to the zoo. I do expect you to consider all of the topics as you look at all of the species of primates at this zoo, but obviously your observations cannot encompass all possibilities; you will only have time to observe and record a few species in some detail. Even then you will have to rely on your own preparation and judgement to determine what to observe, audio record, and later write down. You may go in groups and help each other out, but your written report must be **ENTIRELY YOUR OWN WORK** and based on **YOUR OWN OBSERVATIONS** and recordings. I require that if you go with another student(s), **you must not make the same observations at the same time** (either choose different species or buildings to observe, or do the parts in different order — what I do not want is two students observing the same animals at the same time). Reports similar to those of others are scrutinized carefully; to plagiarize is to fail.

I suggest — but do not require — that you do the parts in this order if possible (that is, if the animals are active and you came by yourself); if you actually conduct your observations in a different order, **you still must write up your paper in this order with the parts numbered like I have**; I'll be able to tell your actual order from the times you have recorded for each observation.

AT THE ZOO: DETAILED INSTRUCTIONS

As you enter the zoo, record the time, date, and weather conditions to make this a scientifically useful observation (I learn a lot from reading them), and include that info in the first part of your written report. (Also tell me which other students you came with!) Don't be afraid to ask questions of the zookeepers and docents and the "regular" visitors throughout the day; include and identify any useful information that you get from them. **Try to stick to the estimated times or you might not finish.**

PART ONE: Baboon Island, just south of Tropic World. Estimated time: 30 minutes

Begin by describing the enclosure and its physical features such as bars, ropes, platforms, etc. **Find a couple of baboons and describe them:** body size, color, fur, face, hands, noses, etc. Also look for these sorts of things: Is there sexual dimorphism? How would you describe their overall body shape and proportions, including limbs? (ex: long or short arms?) Would you describe them as "flat-faced" or "snouty"? Do they have rump pads? Cheek pouches? Do they have tails? If so, are they prehensile? and if so, can you see a touchpad on the tail? Are any of them displaying estrus? Spend about five minutes observing each species and tell me what they are doing. If you see anything else interesting and unexpected, you can include it in your report even if it is not a suggested observation topic, but still be complete on describing the animals.

Then observe the animals for ten minutes, recording anything interesting in their behavior: social interactions, locomotion, etc. You can record as you watch one or more of them and write it up that way, or you can observe them for a while and then record what you have seen in the past few minutes; it is really unstructured in that sense. In this observation we are especially interested in two things: locomotion & social interaction. **LOCOMOTION:** As you watch your animals, consider items like this: How do the animals in the cage move around? Do they stay high up or spend most of the time on the ground? How do they use limbs, hands, and feet for moving about? Fast or slow, leap around or move carefully? Do they stay on top of the branches, or hang underneath them? Support on one branch, or several at a time? What is their posture when resting/sitting? Describe how they climb higher up, and down. Are their backbones parallel to the ground, or what? Are they flexible animals? In what ways is their anatomy appropriate for their locomotion? (consider body size and body posture, and relative sizes of limbs). Do they try to walk bipedally? If so describe it. Even if they are not moving you can describe their posture while sitting or sleeping.

PART TWO: Room one (South America) Estimated time: one hour and a half (record the starting and ending time). Almost all of the animals here are primates. The primates in this South American room are all platyrrhines, that is, New World Monkeys.

Part 2A. Make a list: Begin by describing the enclosure and its physical features such as bars, ropes, platforms, etc. Then read the signs at each end of the railings and identify the different species of primates in this room using the Rowe book. Get both the common and Latin species names (remember to capitalize the Genus, underline or italicize both species and genus). There are only five to seven kinds of monkeys actually in the room for you to see. For each of those species, count the number of adults and juveniles in the troop. Then describe what they look like in general terms so that I can verify what species you are looking at; one suggestion is to describe them as if you are speaking to someone who cannot see them (pretend you are on the phone — after all, you are talking into a tape recorder). Look back at Part One for hints on describing.

Part 2B. Spend the next 30 minutes observing the differences between the Callithricids and the Cebids. In English: you should have noticed that some of the animals you have been looking at are Marmosets and Tamarins (the Callithricid family) and the others are the larger-bodied Cebid family monkeys like the spider monkey. For the next 30 minutes you are going to do an observation comparing the one family with the other; you can use the observations that you already made in Part 2A as a start, but you must make 30 minutes of new observations as well. This is an unstructured observation, you can record anything that the animals do for the next 30 minutes, but we are looking for the similarities and differences in the behavior between the two families. Look especially for differences of locomotion and feeding. See part One for hints on locomotion. **Feeding:** What is it eating? How do they eat it? Where is the food? Eat at the bowl or carry some away? Use hands to eat? Describe use of hands. Biting. Chewing. What can you tell about teeth? Any food sharing with other individuals? How do they tell food from not-food?

Also consider how they are similar or different in how they interact with other members of their own species. How about how they get sensory information (vision, smell, touch)?

Part 2C: One of the spider monkeys is different from the others; in fact it is a different species and thus cannot interbreed with the others, but there is some social interaction. Tell me what is different about that individual's appearance, how it interacts with the others, and ask a docent about it too if you can. Identify the species name from the Rowe book. While you are looking at the spider monkeys, try to determine if that odd one is a male or female; tell me how you could tell. Also look closely at their thumbs, and describe them.

PART THREE: Room two (Asia) Estimated time: one hour (get starting and ending time).

Part 3A. Look at the two kinds of Asian apes. Make a list of common & Latin names, count the individuals, and do all the descriptions that you did in earlier parts. Do you see a young baby or two? Describe the baby and how it holds on to mommy. Look at the Eowe book; are those Sumatran orangs or Bornean ones?

Part 3B. 20 minute Focal Animal Study: Now choose one single individual animal of any of the primate species in this room, in order to observe that one animal in greater detail (that's your FOCAL animal). Once you have chosen an individual, give him or her (can you tell?) a **nickname**, and describe any specifics about its **physical appearance**: how can you tell it from the other individuals of its species – is it larger or smaller, different in color or fur, is its face unique, etc? Now **record everything** it does for the next 20 minutes: include its locomotion but also especially look at the FIVE SENSES and how the individual uses touch, smell, hearing, vision, and taste. How are the senses used to get information about the environments (including other animals)? Also consider how does it **interact socially and communicate** to others? Look for facial expressions, gestures, sniffing and scent marking (or the absence of it), use of calls and hearing; licking; touching to explore and groom, etc. Does one behavior come right after any other behavior, such as sniffing after a fight, or licking before eating? What connection do you see between use of the senses before, during, and after an encounter with another animal? How does your animal explore other objects and animals? (Do not switch from one animal to another, but DO include any interactions your focal animal has with other individuals). **When you write this part up**, it should sound something like this: "Then at 10:05 Stinky jumped down from the branch to the ground, landing on all fours, walked quadrupedally over to the food dish by the viewing window, and pulled out a carrot with one hand; he then ran on all fours with the carrot in his mouth, then put the carrot in one foot and climbed up a vine using both hands and one foot. At 10:07 he sat on his rump and ate it, and then...." etc. That's a focal animal study!

Part 3C. Before you leave the room, look for the cage that is behind you when you are looking at the orangutans; it contains a species of small animals that at one time were thought to be prosimian primates, but now are not considered to be primates at all. Give me the Latin and English names of this species, and (if you are luck enough to see them) spend a few minutes describing them and their behavior and locomotion.

Hang in there, you're more than half done; take a break if you're tired.

PART FOUR: Room three (Africa) Estimated time: one and a half hours (record the starting and ending time). Note there are two separated rooms, one for monkeys and one for gorillas.

Part 4A. Tour the monkey room and make a list: Begin by describing the enclosure and its physical features such as bars, ropes, platforms, etc. Visit each of the animals here for a few minutes to get a feel for the different kinds of Old World Monkeys here. While you are doing this, be sure to read all the signs. **Get out the Rowe book and identify the four or five species with** common & Latin names, and describe the physical appearance of each species (count the individuals, and do all the descriptions) just as you did in earlier Parts. Do you see a newborn baby here also? Since the animals in this room are all catarrhines (the group that

includes OWM and apes), you should be able to see some differences between these OWM's and the NWM's that you observed in Part 2; especially look for and describe the differences in how they sit and how they use their tails. Note that there is an enclosure at the top of the trail behind the gorilla area that has sometimes has some monkeys in it. So for part 4a, your report should have a list of monkey species, and a comparison of the differences YOU SAW in anatomy and behavior between OWM and NWM (start this last item here so you can look again, but finish it at home as you replay your tapes).

Part 4B. Scan Survey Observation of Gorilla SOCIAL BEHAVIOR. Avoid falling into the gorilla pit. Zoo ape houses provide a unique opportunity to play primatologist. First try to identify the individual gorillas from the pictures and signs, and/or by asking docents, keepers, and regular visitors. If you cannot find their real names, just call them A, B, C, etc. Write down whatever there is about each one that helps you to identify it: size, color, sex, facial features, etc. Now get out some paper and a pencil and draw a full page floor plan of the gorilla enclosure, and locate each animal on the drawing. Now you are going to observe them for exactly 30 minutes. Describe where each animal is, and what it is doing at the start. **The SCAN:** You are NOT going to record everything they are doing during the whole time, that would be impossible. Rather you are going to scan the room every five minutes and record what each animal is doing at exactly that instant. At the start, describe where each animal is, and what it is doing. Then wait five minutes and SCAN the room and describe: voice record where each animal IS and what it is doing. IGNORE what they are doing between scans. So proceed to record everything they are doing every five minutes for the next 30 minutes; that will be 7 scans. Look for things like: posture, locomotion, looking, sniffing, eating, and especially social behavior (interactions of any kind with other primates). Make note of the time every five minutes as you record where each animal is and what it is doing. When you write this up, include all your scan observations in five minute intervals. In general look for the interactions between the youngsters and adults, and among each also. At the same time, see how they use facial expressions, gestures, threats, scents, calls, touching, grooming, etc., for communication. What messages are they communicating? Describe any grooming you see in detail, as well as parenting behavior. Are any of the females in estrus? If so, does that affect behavior? Try to view them as unique individuals with different personalities, but interacting within a basic social structure. Does one behavior come right after any other behavior, such as sniffing after a fight? Note which ones are keeping an eye on what others are doing. Also be sure to describe the instances of locomotion in detail -- both arboreal and terrestrial; note that African great apes knuckle-walk; try to describe instances of knuckle-walking in detail

Between the scans you can make note of significant events like a fight. NOTE: this is not an easy assignment; as your first experience in observation, it will be far from perfect. All I expect is that you will give it a good try and record what you can.

Part 4C. Conclusion of scan survey. In conclusion, what can you say about this family's patterns of behavior and interactions? What conclusions can you make from your gorilla observations? Which relationships are guarded, which are friendly? Who are concerned with the kids? Who bosses whom? When you write this up, clearly distinguish between what you observed and how you interpreted it. Remember that if you add anything from books or lectures or people at the zoo or signs, identify it as such.

Now go home and write it up; For your written report, write up what is on your tape for each part, with the times and observations and details. Make sure you include the Latin and common names, descriptions, and the number of individuals for all the species you observed. Your report should be a record of your visit and observations (present it and number it in the order of THESE parts, even if you actually observed things in a different order). Any observation that you made in addition to the assigned ones **can** be included in the written report (that doesn't mean it **has** to be included). Don't just transcribe your tape, but rephrase things to be a readable report (at least leave out most of the sign info and the "uhs" and "oh yeahs" and other things that won't make sense to someone reading the written report). Don't forget to include your interpretations of social organization and behavior for the gorilla project. I want to be able to tell that you went to the zoo well prepared, followed the instructions, observed intelligently, and learned about primates. Review these notes as you are writing, especially the hints. It is not required, but you can add material from the class and from books as needed, but **MAKE IT CLEAR** what is based on your zoo observations and what is from other sources.

Late reports will be accepted for a while after the due date, but you lose points. It is required that you type your report; typing/word processing does give you another chance to rewrite and edit. I will take off for spelling and grammatical errors.

Be sure to **NUMBER** your pages, and **DO NOT PUT YOUR NAME** anywhere on the paper, the envelope, the notes, or the tapes, so that I will not know whose paper I am reading. Use your student ID number instead.

The primary criteria for grading your written reports are the completeness, quality and detail of your descriptions and observations (can I visualize the animals and activities you are talking about?) and how well you followed the instructions; neatness and appearance count somewhat, also — organization helps your grade, but photos and other inclusions add only a little more. You must hand in your original audio tapes or copies of digital recordings and any notes you took at the zoo along with your finished report; put everything together in one big envelope. I do **NOT** want your rough drafts. The best papers in previous years were about 10 typed pages long, but length itself does not affect your grade.

NOTE: This is a long and complex assignment; NO ONE gets all the data needed for a perfect paper. Lots of students get enough, and write it out well enough, to get an "A" on the report; most students manage to make even fewer observations, but if they go to the zoo and make a good try, they will get credit for this required project, and a decent grade.