

Shared Laboratories Policies and Procedures

The H.J. Andrews Experimental Forest (HJA) was established to promote research and education and to improve our understanding of Pacific Northwest ecosystems and natural resource management. The HJA welcomes basic and applied research and education projects that do not conflict with existing programs or detract from the quality of the site. Users of the HJA headquarters facilities are welcome to use the laboratories, upon approval of Forest Director or Site Manager.

Laboratory Use Policy

The labs are designed for shared use. Exclusive use of the labs may be able to be arranged and would be charged a bench fee (See Reservation and Fees page of website). Requests for laboratory space must be submitted to the Forest Director and made at least one week in advance of anticipated use. Requests should include a description of the procedures to be used in the laboratory and the time period for which space is needed. The Forest Director will confer with other user scientists/researchers before assigning lab space to ensure that possible contamination and conflicts do not occur.

Basic equipment and glassware are provided for use in the labs; please refer to the lab inventory (appendix 1) for lists and location. Please put all equipment and glassware back where you found them.

The Andrews Forest does not maintain stocks of lab chemicals and will not store excess supplies of hazardous chemicals beyond the initial period of use for a given project. Researchers are responsible for acquiring and transporting needed chemicals to the laboratory facilities, storing them safely while on site, and disposing of used and excess chemicals appropriately. The Andrews septic system cannot handle waste chemicals, so disposal down drains is not permitted; the exception to this rule is for neutralized acids or bases within the PH range 6-9.5. Flammable chemicals must be stored in the Flammable Storage Cabinet in Lab 115.

Some storage space is available in the labs or elsewhere in the administrative building. Please contact the Forest Director with questions about long- or short-term storage of personal lab supplies and equipment. All personal lab equipment and supplies must be labeled with name and date or it is subject to removal.

General Laboratory Safety Protocols as required by [OSU Environmental Health and Safety](#) must be followed at all times by all lab users.

Designated Laboratories:

The reserved laboratories are oriented to long-term project areas at the Andrews Forest. As needs arise other program areas can potentially use them on a short-term basis. Decisions on allocation reside with the Forest Director and the long-term users of the specific lab.

Watershed. This lab serves as base lab for the long term watershed and climate programs; it is not available for public use.

Vegetation/Entomology. Housing the herbarium, associated publications and microscopes (dissecting and compound), this lab is the primary location for vegetation and entomological studies of all kinds.

Vertebrate. The base lab for the studies associated with the long-term northern spotted owl demographics research.

Wet Chemistry and GC/Isotope. These two labs are managed as one because of equipment shared between the two. Configuration is apt to change frequently in accordance with different project needs, but use is intended to provide flexibility for both terrestrial and aquatic studies requiring on-site analytical space.

NOTE=>NEITHER OF THESE TWO LABS SHOULD EVER BE USED FOR PROCESSING SAMPLES WITH ENRICHED STABLE ISOTOPES.

Art McKee Teaching Lab. As the name implies, this is primarily a teaching area and as such cannot be assigned for long periods of time to projects. It is, however, available for short-term use that does not damage the facilities. For instance, setting up for plant, insect, fish identification, or for aerial photo interpretation, or for GIS analyses would be fine, whereas grinding soil or tissue samples or processing large chunks of rotting logs would not be appropriate. This lab has been used in the past for processing samples with enriched stable isotopes, and should be considered contaminated.

Computer Lab. Follow this link for computer information, including general information, acceptable use policies, file storage information, software, and priorities of use.

Special Issues:

Stable Isotopes. Stable isotope analyses involving samples with enriched isotopes (e.g., ^{15}N , ^{13}C) present a serious problem of possible contamination of a laboratory designed for samples with natural abundances. This is a serious problem, and consequently, we have two labs where enriched samples may be processed. Enriched samples have already been processed in the Watershed Lab, and in the Teaching Lab, which are now considered contaminated. Both facilities may be used for future enriched isotope work, as long as the procedures do not damage the facilities.

Drying ovens. The large drying oven is currently maintained by the Decomposition Component of LTER. The Andrews Forest Director should be contacted for permission to use the oven. The drying oven in the Mud Room is not maintained by a particular lab group. Contact the Forest Director for permission to use the oven.

Muffle furnace use. The muffle furnace should always be in a fume hood when turned on. The preferred location is in the fume hood in the Watershed lab.

Cold Room. A large walk in refrigerator (~38 deg F) can be used for overnight storage of samples. Contact the Forest Director for permission.

Grinding soil and tissue samples. Some preparations of samples are inherently messy, and grinding is one of those. Possible locations for "messy preps" include: 1) the bays of the snowcat garage; 2) Mud Room in the Lab/Office building; 3) bay of the Storage Barn (Gray Barn); and 4) covered area by the walk in cooler. Contact the Forest Director if you need a location to grind samples.

Appendix 1. Lab Inventory Andrews Forest

Name	Lab #	Location
activated alumina	115	B21
ammonium chloride	115	B20
apron	115	B2
barium hydroxide	115	B20
bottles - wheaton 1L w/caps	115	T1
bottles - wheaton 500ml w/caps	115	T1
bottles- 200ml w/caps	115	T3
butanol	115	counter
calcium carbide	115	B21
calcium chloride	115	B21
chemicals	115	B20 & B21
cleanser	115	B1
constant temp bath with stir	115	counter
dessicator	115	counter
dextrose - anhydrous powder	115	B20
dimethyle formamide	115	B20
dodecyl sodium sulfate	115	B21
dowex - 50W hydrogen form	115	B20
drierite	115	B21
duraseal	115	T10
Erlenmeyer flasks - 2L	115	T7
ethanol	115	counter
ethyl acetate	115	counter
funnel - large plastic	115	T3
GC	115	B18
GC supplies	115	B12,B13,B14,B15,B16,B17
gloves	115	B1
gloves	115	T11
glucose	115	B21
glycine hydrochloride	115	B21
goggles	115	B2
hexasecyltrimethyleammonim bromide	115	B20
indicator paper (PH paper)	115	B4
ionanalyzer - orion	115	T4
kim wipes - large	115	T9
kimwipes - Small	115	T11
lab notebooks	115	T12
labink	115	B4
large upright freezer	115	counter
leak - check	115	T10
light bulbs	115	B5
lithium aluminum hydroxide	115	B20
manganous sulfate	115	B21
manuals - misc	115	T13
mercontainer	115	B21
mercury vapor suppressant	115	B21
methanol	115	counter
microfuge - beckman	115	T4
microfuge - tubes	115	T4

microscope, portable in case	115	counter
microwave	115	counter
nickel	115	B21
office supplies	115	B8
oven	115	counter
oven mitts	115	B9
p - nitrophenol	115	B20
paper towels	115	T9
peper towels	115	B1
PH electrode - orion	115	T5
PH meter - Coleman	115	T5
regulators	115	B11
respirator	115	B2
ring stand hardware	115	B11
safety glasses	115	B2
safety glasses - new	115	T8
scoopula	115	B5
soda lime	115	B21
sodium hydroxide	115	B20
sodium iodide	115	B20
sodium nitrate	115	B20
sodium phosphate	115	B20
soil tester	115	T6
soluable starch rgt.	115	B21
stir plate	115	counter
stopcock grease	115	B21
stopper - grey butyl	115	B7
strain gauge transducer	115	T6
succinic acid	115	B20
test tube racks	115	B6
test tube, racks	115	T2
test tubes	115	B6 & B7
test tubes, misc	115	T2 & T3
thimerosal	115	B20
tools	115	B3
tripple beam balance with weights	115	counter
Tripple beam box	115	T5
trizma base	115	B20
tweezers	115	B4
tyrosine	115	B21
upright (floor) incubator	115	counter
vortex	115	counter
weigh boats	115	T7
weight boats	115	B4
zinc sulfate	115	B21
ammonium chloride/potassium chloride	116	suggest disposal
balance - mettler	116	counter
beaker - 10 ml	116	T5
beaker - 100 ml	116	T5
beaker - 1L	116	T5
beaker - 20 ml	116	T5
beaker - 250 ml	116	T5

beaker - 30 ml	116	T5
beaker - 400 ml	116	T5
beaker - 50 ml	116	T5
beaker - 500 ml	116	T5
beaker - plastic	116	T3
bromide standard	116	B35
burets	116	counter
calcium chloride solutions	116	suggest disposal
cavuum pump hand operated	116	counter
centrifuge - sorvail bench top	116	counter
centrifuge tubes	116	B19
centrifuge tubes	116	B33
centrifuge tubes racks	116	B33
cleansers	116	B2
cuvette rack	116	B28
cuvettes - disposable	116	B28
DI water system	116	counter
electrode arm	116	T9
Erlenmeyer flasks - 125 ml	116	T1
Erlenmeyer flasks - 125 ml	116	T2
Erlenmeyer flasks - 1L	116	T1
Erlenmeyer flasks - 250 ml	116	T1
erlenmeyer flasks - 2L	116	counter
Erlenmeyer flasks - 50 ml	116	T1
Erlenmeyer flasks - 500ml	116	T1
filter discs	116	T4
filter flask - 1l	116	T2
filter flasks - 250 ml	116	T4
filter flasks - 50 ml	116	T4
filter flasks - 500 ml	116	T4
filter gittings - misc.	116	B5
filter holders	116	T4
filter papers	116	T4
filtering flasks - 1	116	T9
filtering pump + flask	116	counter
filtration system - millipore sterifil	116	T4
funnels - glass	116	T5
funnels - small plastic	116	T10
glassware - misc.	116	B31
glassware - misc.	116	T7
gloves	116	B2
Graduated cylinders - 10 ml	116	T7
Graduated cylinders - 100 ml	116	T7
Graduated cylinders - 1l	116	T6
Graduated cylinders - 25 ml	116	T7
Graduated cylinders - 250 ml	116	T6
Graduated cylinders - 2l	116	T6
Graduated cylinders - 50 ml	116	T7
Graduated cylinders - 500 ml	116	T6
hose clamps	116	B26
hot plate	116	B34
hydrochloric acid	116	B35

incubator - bench top	116	counter
incubator trays	116	B1
jars - 100 ml w/septum	116	B1
lab coats	116	B34
lids	116	B10
magnesium perchlorate	116	B36
manuals - misc	116	B24
mineral oil	116	suggest disposal
mixers	116	B34
nalgene bottles - misc	116	T3
nalgene container - 1 gallon	116	T2
needles	116	B32
needles	116	counter
office supplies	116	B25
parafilm	116	T10
PH meter - orion	116	counter
PH supply	116	B22
pipet bulbs - small	116	B26
pipet tips	116	B20
pipet tips - misc	116	T10
pipets - disposable various sizes	116	B37
pipets - misc.	116	B8+B9
pipets - transfer	116	B37
pipettes - adjustable	116	B21
potassium chloride solutions	116	suggest disposal
repipet	116	B26
scintillation vials	116	B34
scoopula	116	B7
septum	116	B6
shaker	116	B34
sharps disposal	116	B32
slide preparation materials	116	B32
sodium hydroxide solution	116	suggest disposal
sodiumnitrate solution	116	suggest disposal
spatula	116	B30
spatula	116	B7
stir bars	116	B30
stir plate	116	counter
stir retriever	116	B30
stir rods	116	B30
stoppers	116	B10
syringes	116	B32
syringes	116	counter
tank base solution	116	suggest disposal
tank supports	116	B37
test tube brushes	116	B2
test tubes - misc.	116	B18
test tubes with screw tops and lids	116	B29
toploader balance guard	116	B17
tri base solution	116	suggest disposal
tubing - misc.	116	B1
tweezers	116	B7

tweezers	116	T4
UV-vis spectrophotometer - shimadzu	116	counter
vacuum grease	116	T4
vacuume pump oil	116	T4
vials - small plastic	116	B1
volumetric flasks - 25 ml	116	T8
volumetric flasks - 250 ml	116	T8
volumetric flasks - 50 ml	116	T8
volumetric flasks - 500 ml	116	T5
volumetric flasks - 500 ml	116	T8
volumetric pipets - 10 ml	116	B11
volumetric pipets - 20 ml	116	B13
volumetric pipets - 25 ml	116	B14
volumetris pipets - 15ml	116	B12
watch glasses	116	B27
weigh boats - aluminum	116	B7
weigh paper	116	B7
weight set - calibrated	116	B15
wheaton jar with lid - 1L	116	T11
wheaton jar with lid - 250 ml	116	T11
wheaton jar with lid - 500 ml	116	T11