**COUNCIL** 

**RISK ASSESSMENT** 

**WORK SHEET** 

### THE GOOD, THE BAD AND THE FUNGI

APPENDIX 1
LOOKING AT FUNGI



Service:	
<b>Activity Details:</b>	LOOKING AT FUNGI
Date:	2 August 2002
	APPENDIX 1 PAGE 1 OF 3

#### **HAZARD**

Look only for hazards which you could reasonably expect to result in significant harm under the conditions in your workplace. Use the following list:-

Electrical 15. Animals 2. Lifting and Moving 16. Outside Activities Violence Chemicals 17. Dusts/Fumes/Mists/Vapours 18. Slips and Trips 19. **Biological Agents** Radiation 6. Work Equipment and Its Use 20. Fire Working Over or Near Water 7. General Environment 21. 8. Display Screen Equipment 22. Falling Objects and Workstations Confined Spaces 23. 9. Sharp Instruments 24. Excavations 10. Hot and Cold Surfaces 25. Working On Your Own Pressurised Flammable Gas 26a. Projects/Experiments/Processes 11.

26b. Workshops/Coaching Sessions Food Hygiene 27. Vehicle Interface Working From Height 28. Pedestrian Traffic Routes 14. Noise 29. Driving

Systems

#### WHO MIGHT BE HARMED?

There is no need to list individuals by name - just think about groups of people doing similar work or who may be affected, e.g.:-

- Office staff Operators Maintenance personnel Cleaners
- Members of the public Contractors
- People sharing your workplace

Pay particular attention to:-

Staff with disabilities Inexperienced staff Visitors Lone workers

They may be more vulnerable

List ha	azards here:
1	Collecting
2	Identification
3	Poisons
4	Allergy
5	Ingestion
6	Class participation
7	Disposal
8	Sharps
9	Hygiene

List groups of people who are	e especially at risk from the
significant hazards which you	ı have identified:

Service:		
Activity Details:	LOOKING AT FUNGI	
Date:		
	APPENDIX 1 PAGE 2 OF 3	
Have you already take	DEQUATELY CONTROLLED?  en precautions against the risks from ? For example, have you provided:-	WHAT FURTHER ACTION IS NECESSARY TO
<ul> <li>Adequate information, instruction or training?</li> <li>Adequate systems or procedures?</li> <li>Do the precautions:-</li> <li>Meet the standards set by a legal requirement? Comply with a recognised industry standard? Represent good practice? Reduce risk as far as reasonably practicable?</li> <li>If so, then the risks are adequately controlled, but you need to indicate the precautions you have in place. Refer to your generic risk assessment manual.</li> </ul>		What more could you reasonably do for those risks which you found were not adequately controlled?  You will need to give priority to those risks which affect large numbers of people and / or could result in serious harm. Apply the principles below when taking further action, if possible in the following order:-  Remove the risk completely Try a less risky option Prevent access to the hazard (e.g. by guarding) Organise work to reduce exposure to the hazard Issue personal protective equipment Provide welfare facilities (e.g. washing facilities for removal of contamination and first-aid)
(stock conse P4-7 + supe Seek landow Purchase fur supermarket	rvised activity 1:8 recommended. rners permission ngi from a reputable source such as a cottish Office instruction on farm ountry code	List the risks which are not adequately controlled and the action you will take where it is reasonably practicable to do more. You are entitled to take cost into account, unless the risk is high:

1	Collection Collection from wild is a teacher managed activity (stock conservation) P4-7 + supervised activity 1:8 recommended. Seek landowners permission Purchase fungi from a reputable source such as a supermarket. Follow the Scottish Office instruction on farm visits Follow the country code Be aware of livestock Ensure someone knows where you are
2	Identification Follow the instructions as detailed for the activity
3	Poisons Follow the instructions on the activity sheet The Fly Agaric should be handled by teacher only Do not ingest Keep hands out of the mouth and avoid rubbing the eyes Wash hands
4	Allergies Very slight risk of asthmatic irritation
5	Ingestion  No material to be eaten  If ingestion occurs seek medical assistance and bring a sample of the fungus with you to the doctors/hospital

List the risks which are not adequately controlled and the action you will take where it is reasonably practicable to do more. You are entitled to take cost into account, unless the risk is high:					
Risk ratin High	g with all	controls in	n place	Low	

LOOKING AT FUNGI			
APPENDIX 1 PAGE 3 OF 3			
IS THE RISK ADEQUATELY CONTROLLED?			
n precautions against the risks from For example, have you provided:-	WHAT FURTHER ACTION IS NECESSARY TO CONTROL THE RISK?		
] n	APPENDIX 1 PAGE 3 OF 3  EQUATELY CONTROLLED?  precautions against the risks from		

- Adequate information, instruction or training?
- Adequate systems or procedures?

Do the precautions:-

 Meet the standards set by a legal requirement? Comply with a recognised industry standard? Represent good practice? Reduce risk as far as reasonably practicable?

If so, then the risks are adequately controlled, but you need to indicate the precautions you have in place. Refer to your generic risk assessment manual.

### List existing controls here or note where the information may be found: 6 Class participation Collection from wild is a teacher managed activity (stock conservation) P1-3 collection should be a teacher only activity P4-7+ is a teacher and class activity Refer to the activity sheet and the general instructions (Health and Safety) The Fly Agaric should be handled by teacher only Follow the Scottish Office instruction on farm visits 7 Disposal Solids double wrap all material and place in the outside bin 8 Sharps Teacher only activity use a sharp vegetable knife and vegetable board. Ensure the equipment is washed before returning to store. 9 Hygiene Wash hands after the activity

What more could you reasonably do for those risks which you found were not adequately controlled?

- Remove the risk completely
- Try a less risky option
- Prevent access to the hazard (e.g. by guarding)
- Organise work to reduce exposure to the hazard
- Issue personal protective equipment
- Provide welfare facilities (e.g. washing facilities for removal of contamination and first-aid)

List the risks which are not adequately controlled and the action you will take where it is reasonably practicable to do more. You are entitled to take cost into account, unless the risk is high:			
Risk rating with all controls in place			
High Med Low X			

**COUNCIL** 

**RISK ASSESSMENT** 

**WORK SHEET** 

### THE GOOD, THE BAD AND THE FUNGI

**APPENDIX 2** 

**SPORE PRINTS** 



Service:	
<b>Activity Details:</b>	MAKING A SPORE PRINT
Date:	2 August 2002
	APPENDIX 2 PAGE 1 OF 3

#### **HAZARD**

Look only for hazards which you could reasonably expect to result in significant harm under the conditions in your workplace. Use the following list:-

Electrical 15. Animals Lifting and Moving Outside Activities 2. 16. 3. Chemicals 17. Violence Dusts/Fumes/Mists/Vapours Slips and Trips 18. **Biological Agents** 5. 19. Radiation Work Equipment and Its Use 20. Fire General Environment Working Over or Near Water 8. Display Screen Equipment 22. Falling Objects and Workstations Confined Spaces 23. Sharp Instruments Excavations Hot and Cold Surfaces Working On Your Own 10. 25. Pressurised Flammable Gas 26a. Projects/Experiments/Processes 11. Systems 26b. Workshops/Coaching Sessions Food Hygiene Vehicle Interface Working From Height 28. Pedestrian Traffic Routes 13.

29.

Driving

Noise

#### WHO MIGHT BE HARMED?

There is no need to list individuals by name - just think about groups of people doing similar work or who may be affected, e.g.:-

- Office staffMaintenance personnelOperatorsCleaners
- Contractors
   Members of the public
- People sharing your workplace

Pay particular attention to:-

Staff with disabilities
 Visitors
 Inexperienced staff
 Lone workers

They may be more vulnerable

List hazards here:			
1	Collecting		
2	Identification		
3	Poisons		
4	Allergy		
5	Ingestion		
6	Class participation		
7	Disposal		
8	Sharps		
9	Chemicals		
10	Hygiene		

List groups of people who are especially at risk from	the
significant hazards which you have identified:	

Service:				
<b>Activity Details:</b>	MAKING A SPORE PRINT			
Date:				
	APPENDIX 2 PAGE 2 OF 3			
IS THE RISK ADEQUATELY CONTROLLED?				
	aken precautions against the risks from	R ACTION IS NECESSARY TO		

the hazards you listed? For example, have you provided:-

- Adequate information, instruction or training?
- Adequate systems or procedures?

Do the precautions:-

Meet the standards set by a legal requirement? Comply with a recognised industry standard? Represent good practice? Reduce risk as far as reasonably practicable?

If so, then the risks are adequately controlled, but you need to indicate the precautions you have in place. Refer to your generic risk assessment manual.

### List existing controls here or note where the information may be found: 1 Collection Collection from wild is a teacher managed activity (stock conservation) P4-7+ supervised activity 1:8 recommended Seek landowners permission Purchase fungi from a reputable source such as a supermarket. Follow the Scottish Office instruction on farm visits Follow the country code Be aware of livestock Ensue someone knows where you are 2 Identification Follow the instructions as detailed for the activity 3 **Poisons** Follow the instructions on the activity sheet Do not ingest Keep hands out of the mouth and avoid rubbing the eyes Wash hands 4 Allergies Very slight risk of asthmatic irritation 5 Ingestion No material to be eaten If ingestion occurs seek medical assistance and bring a sample of the fungus with you to the doctors/hospital

### **CONTROL THE RISK?**

What more could you reasonably do for those risks which you found were not adequately controlled?

- Remove the risk completely
- Try a less risky option
- Prevent access to the hazard (e.g. by guarding)
- Organise work to reduce exposure to the hazard
- Issue personal protective equipment
- Provide welfare facilities (e.g. washing facilities for removal of contamination and first-aid)

List the risks wh the action you we practicable to do account, unless t	ill take where it more. You are	is reasonably	
Risk rating with a	ll controls in plac	ce	
High	Med	Low	

Service:	
Activity Details:	MAKING A SPORE PRINT
Date:	
	APPENDIX 2 PAGE 3 OF 3

Have you already taken precautions against the risks from the hazards you listed? For example, have you provided:-

- Adequate information, instruction or training?
- Adequate systems or procedures?

Do the precautions:-

 Meet the standards set by a legal requirement? Comply with a recognised industry standard? Represent good practice?
 Reduce risk as far as reasonably practicable?

If so, then the risks are adequately controlled, but you need to indicate the precautions you have in place. Refer to your generic risk assessment manual.

# List existing controls here or note where the information may be found:

Class participation
Collection from wild is a teacher managed activity
Spore printing is a P1-3+ activity
Refer to the activity sheet and the general
instructions (Health and Safety)
Follow the Scottish Office instruction on farm
visits

7 Disposal Solids double wrap all material and place in the

outside bin

8 Sharps

Teacher only activity use a sharp vegetable knife and vegetable board.

Ensure they are washed before returning to store.

9 Chemicals

Hair spray

Teacher only activity

Domestic pack safety instructions on the can

10 Hygiene

Wash hands after the activity

### WHAT FURTHER ACTION IS NECESSARY TO CONTROL THE RISK?

What more could you reasonably do for those risks which you found were not adequately controlled?

- Remove the risk completely
- Try a less risky option
- Prevent access to the hazard (e.g. by guarding)
- Organise work to reduce exposure to the hazard
- Issue personal protective equipment
- Provide welfare facilities (e.g. washing facilities for removal of contamination and first-aid)

the actio	n you will	take who	ere it is re u are enti	ely controllo asonably tled to take	
Risk ratio	ng with all	controls i	n place		
High		Med		Low	X

**COUNCIL** 

RISK ASSESSMENT

**WORK SHEET** 

### THE GOOD, THE BAD AND THE FUNGI

**APPENDIX 3** 

WHERE DO FUNGI GROW? MAKING A HABITAT COLLAGE



Service:	
<b>Activity Details:</b>	WHERE DO FUNGI GROW? MAKING A HABITAT COLLAGE
Date:	2 August 2002
	APPENDIX 3 PAGE 1 OF 3

#### **HAZARD**

Look only for hazards that you could reasonably expect to result in significant harm under the conditions in your workplace. Use the following list:-

Electrical 15. Animals Lifting and Moving Outside Activities 2. 16. 3. Chemicals 17. Violence Dusts/Fumes/Mists/Vapours Slips and Trips 18. **Biological Agents** 5. 19. Radiation Work Equipment and Its Use 20. Fire General Environment Working Over or Near Water 8. Display Screen Equipment 22. Falling Objects and Workstations 23. Confined Spaces Sharp Instruments Excavations Hot and Cold Surfaces Working On Your Own 10. 25. Pressurised Flammable Gas 26a. Projects/Experiments/Processes 11.

 Hot and Cold Surfaces
 Pressurised Flammable Gas Systems
 Food Hygiene
 Working On Your Own
 Projects/Experiments/Processes
 Workshops/Coaching Sessions
 Vehicle Interface
 Working From Height
 Noise
 Driving

#### WHO MIGHT BE HARMED?

There is no need to list individuals by name - just think about groups of people doing similar work or who may be affected, e.g.:-

Office staffMaintenance personnelCleaners

Contractors • Members of the public

People sharing your workplace

Pay particular attention to:-

Staff with disabilities

Visitors

• Inexperienced staff
• Lone workers

They may be more vulnerable

List ha	zards here:
1	Collection
2	Identification
3	Poisons
4	Allergy
5	Ingestion
6	Class participation
7	Disposal
8	Sharps
9	Hygiene

List groups of people v	who are	especially	at risk fro	m the
significant hazards wh	ich you	have ident	tified:	

Service:	
Activity Details:	WHERE DO FUNGI GROW? MAKING A HABITAT COLLAGE
Date:	
	APPENDIX 3 PAGE 2 OF 3

Have you already taken precautions against the risks from the hazards you listed? For example, have you provided:-

- Adequate information, instruction or training?
- Adequate systems or procedures?

Do the precautions:-

 Meet the standards set by a legal requirement? Comply with a recognised industry standard? Represent good practice?
 Reduce risk as far as reasonably practicable?

If so, then the risks are adequately controlled, but you need to indicate the precautions you have in place. Refer to your generic risk assessment manual.

### List existing controls here or note where the information may be found: 1 Collection Collection from wild is a teacher managed activity (stock conservation) P4-5+ supervised activity 1-8 recommended Seek landowners permission Follow the Scottish Office instruction on farm visits Follow the country code Be aware of livestock Ensue someone knows where you are 2 Identification Follow the instructions as detailed for the activity 3 **Poisons** Follow the instructions on the activity sheet Do not ingest Keep hands out of the mouth and avoid rubbing the eyes Wash hands Allergies 4 Very slight risk of asthmatic irritation 5 Ingestion No material to be eaten If ingestion occurs seek medical assistance and bring a sample of the fungus with you to the doctors/hospital

### WHAT FURTHER ACTION IS NECESSARY TO CONTROL THE RISK?

What more could you reasonably do for those risks which you found were not adequately controlled?

- Remove the risk completely
- Try a less risky option
- Prevent access to the hazard (e.g. by guarding)
- Organise work to reduce exposure to the hazard
- Issue personal protective equipment
- Provide welfare facilities (e.g. washing facilities for removal of contamination and first-aid)

List the risks which are not adequately the action you will take where it is reas practicable to do more. You are entitl account, unless the risk is high:	sonably
Risk rating with all controls in place High Med	Low

Service:	
Activity Details:	WHERE DO FUNGI GROW? MAKING A HABITAT COLLAGE
Date:	
	APPENDIX 3 PAGE 3 OF 3

Have you already taken precautions against the risks from the hazards you listed? For example, have you provided:-

- Adequate information, instruction or training?
- Adequate systems or procedures?

Do the precautions:-

 Meet the standards set by a legal requirement? Comply with a recognised industry standard? Represent good practice? Reduce risk as far as reasonably practicable?

If so, then the risks are adequately controlled, but you need to indicate the precautions you have in place. Refer to your generic risk assessment manual.

### List existing controls here or note where the information may be found: 6 Class participation Collage P1-3+ activity Collecting P4-7+ activity Refer to the activity sheet and the general instructions (Health and Safety) Follow the Scottish Office instruction on farm Fly agarics teacher only handling activity 7 Disposal All material and place in the outside bin 8 Teacher only activity use a sharp vegetable knife Children may use blunt nosed scissors Ensure equipment is washed before returning to store. 9. Hygiene Wash hands after the activity

# WHAT FURTHER ACTION IS NECESSARY TO CONTROL THE RISK?

What more could you reasonably do for those risks which you found were not adequately controlled?

- Remove the risk completely
- Try a less risky option
- Prevent access to the hazard (e.g. by guarding)
- Organise work to reduce exposure to the hazard
- Issue personal protective equipment
- Provide welfare facilities (e.g. washing facilities for removal of contamination and first-aid)

the action	you will le to do n	take wher nore. You	ndequately e it is reas are entitle gh:	onably	
Risk rating	g with all	controls in	place		
High		Med		Low	X

**COUNCIL** 

**RISK ASSESSMENT** 

**WORK SHEET** 

### THE GOOD, THE BAD AND THE FUNGI

APPENDIX 4
GROWING MUSHROOMS



Service:	
<b>Activity Details:</b>	GROWING MUSHROOMS
Date:	2 August 2002
	APPENDIX 4 PAGE 1 OF 3

#### **HAZARD**

Look only for hazards which you could reasonably expect to result in significant harm under the conditions in your workplace. Use the following list:-

Electrical 15. Animals 2. Lifting and Moving 16. Outside Activities Violence Chemicals 17. Dusts/Fumes/Mists/Vapours 18. Slips and Trips 19. **Biological Agents** Radiation 6. Work Equipment and Its Use 20. Fire Working Over or Near Water 7. General Environment 21. 8. Display Screen Equipment 22. Falling Objects and Workstations Confined Spaces 23. 9. Sharp Instruments 24. Excavations 10. Hot and Cold Surfaces 25. Working On Your Own Pressurised Flammable Gas 26a. Projects/Experiments/Processes 11. 26b. Workshops/Coaching Sessions Systems Food Hygiene 2.7 Vehicle Interface Working From Height 28. Pedestrian Traffic Routes

29. Driving

Noise

#### WHO MIGHT BE HARMED?

There is no need to list individuals by name - just think about groups of people doing similar work or who may be affected, e.g.:-

- Office staffMaintenance personnelCleaners
- Contractors Members of the public
- People sharing your workplace

Pay particular attention to:-

Staff with disabilities
 Visitors
 Inexperienced staff
 Lone workers

They may be more vulnerable

List ha	azards here:
1	Collecting
2	Identification
3	Poisons
4	Allergy
5	Ingestion
6	Class participation
7	Disposal
8	Sharps
9	Chemicals
10	Hygiene

List	groups of people	who are	especially	at risk from	the
signi	ificant hazards wl	hich vou	have ident	tified:	

Service:	
Activity Details:	GROWING MUSHROOMS
Date:	
	APPENDIX 4 PAGE 2 OF 3

Have you already taken precautions against the risks from the hazards you listed? For example, have you provided:-

- Adequate information, instruction or training?
- Adequate systems or procedures?

Do the precautions:-

 Meet the standards set by a legal requirement? Comply with a recognised industry standard? Represent good practice?
 Reduce risk as far as reasonably practicable?

If so, then the risks are adequately controlled, but you need to indicate the precautions you have in place. Refer to your generic risk assessment manual.

### List existing controls here or note where the information may be found: 1 Collection Only grow mushrooms from a reputable supplier such as Anne Miller Greenbank, Meiklewartle, Inverurie AB51 5AA 2 Identification Follow the instructions as detailed on the pack 3 **Poisons** No poisons risk but for hygiene risk do not eat Do not ingest Keep hands out of the mouth and avoid rubbing the eyes Wash hands 4 Allergies Very slight risk of asthmatic irritation 5 Ingestion No material to be eaten If ingestion occurs seek medical assistance and bring a sample of the fungus with you to the doctors/hospital

### WHAT FURTHER ACTION IS NECESSARY TO CONTROL THE RISK?

What more could you reasonably do for those risks which you found were not adequately controlled?

- Remove the risk completely
- Try a less risky option
- Prevent access to the hazard (e.g. by guarding)
- Organise work to reduce exposure to the hazard
- Issue personal protective equipment
- Provide welfare facilities (e.g. washing facilities for removal of contamination and first-aid)

List the risks which are not adequately controlled and the action you will take where it is reasonably practicable to do more. You are entitled to take cost into account, unless the risk is high:				
Risk rating w	ith all controls in	ı place		
High [	Med		Low	

Service:		
<b>Activity Details:</b>	GROWING MUSHROOMS	
Date:		
	APPENDIX 4 PAGE 3 OF 3	
IS THE RISK ADEQUATELY CONTROLLED?  Have you already taken precautions against the risks from the hazards you listed? For example, have you provided:  • Adequate information, instruction or training?  • Adequate systems or procedures?  Do the precautions:-  • Meet the standards set by a legal requirement? Comply with a recognised industry standard? Represent good practice? Reduce risk as far as reasonably practicable?  If so, then the risks are adequately controlled, but you need to indicate the precautions you have in place. Refer to your generic risk assessment manual.		WHAT FURTHER ACTION IS NECESSARY TO CONTROL THE RISK?  What more could you reasonably do for those risks which you found were not adequately controlled?  You will need to give priority to those risks which affect large numbers of people and / or could result in serious harm. Apply the principles below when taking further action, if possible in the following order:-  Remove the risk completely Try a less risky option Prevent access to the hazard (e.g. by guarding) Organise work to reduce exposure to the hazard Issue personal protective equipment
List existing controls here or note where the information may be found:		<ul> <li>Issue personal protective equipment</li> <li>Provide welfare facilities (e.g. washing facilities for removal of contamination and first-aid)</li> </ul>
		List the risks which are not adequately controlled and the action you will take where it is reasonably practicable to do more. You are entitled to take cost into account, unless the risk is high:
7 Disposal Solids double outside bin	e wrap all material and place in the	
and vegetabl	activity use a sharp vegetable knife e board.  Soment is washed before returning to	
9 Hygiene Wash hands	after the activity	Risk rating with all controls in place

High

Med

Low

**COUNCIL** 

RISK ASSESSMENT

**WORK SHEET** 

### THE GOOD, THE BAD AND THE FUNGI

**APPENDIX 5** 

**EXPERIMENTING WITH FUNGI** (INCLUDING COSHH)



Service:	
<b>Activity Details:</b>	EXPERIMENTING WITH FUNGI
Date:	7 August 2002
	APPENDIX 5 PAGE 1 OF 5

#### **HAZARD**

Look only for hazards which you could reasonably expect to result in significant harm under the conditions in your workplace. Use the following list:-

Electrical 15. Animals Lifting and Moving Outside Activities 2. 16. 3. Chemicals 17. Violence Dusts/Fumes/Mists/Vapours 4. Slips and Trips 18. 5. **Biological Agents** 19 Radiation Work Equipment and Its Use 20. General Environment Working Over or Near Water 21. Display Screen Equipment Falling Objects 8. 22. Confined Spaces and Workstations 23. Sharp Instruments Excavations 10. Hot and Cold Surfaces 25. Working On Your Own

Pressurised Flammable Gas 26a. Projects/Experiments/Processes 11. Systems 26b. Workshops/Coaching Sessions Food Hygiene 27. Vehicle Interface 28. Pedestrian Traffic Routes

Working From Height 13. 14. Noise 29. Driving

There is no need to list individuals by name - just think about groups of people doing similar work or who may be affected, e.g.:-

WHO MIGHT BE HARMED?

Office staff Operators Maintenance personnel Cleaners

Contractors Members of the public

People sharing your workplace

Pay particular attention to:-

Staff with disabilities Inexperienced staff Lone workers Visitors

They may be more vulnerable

List hazards here:		
1	Collection	
2	Identification	
3	Poisons	
4	Allergy	
5	Ingestion	
6	Class participation	
7	Disposal	
8	Sharps	
9	Chemicals	
10	Hygiene	

List groups of people who are especially at risk from the
significant hazards which you have identified:

Service:	
Activity Details:	EXPERIMENTING WITH FUNGI
Date:	
	APPENDIX 5 PAGE 2 OF 5

Have you already taken precautions against the risks from the hazards you listed? For example, have you provided:-

- Adequate information, instruction or training?
- Adequate systems or procedures?

Do the precautions:-

 Meet the standards set by a legal requirement? Comply with a recognised industry standard? Represent good practice?
 Reduce risk as far as reasonably practicable?

If so, then the risks are adequately controlled, but you need to indicate the precautions you have in place. Refer to your generic risk assessment manual.

### List existing controls here or note where the information may be found:

1 Collection

Collection from wild is a teacher managed activity (stock conservation)

P4-7+ supervised activity 1:8 recommended Seek landowners permission

Follow the Scottish Office instruction on farm visits

Follow the country code

Be aware of livestock

Ensue someone knows where you are

2 Identification

Follow the instructions as detailed for the activity Only grow fungi / mushrooms from a reputable supplier

3 Poisons

Follow the instructions on the activity sheet

Only collect the listed examples

Do not ingest

Keep hands out of the mouth and avoid rubbing the eyes

Wash hands

- 4 Allergies
- 5 Ingestion

If ingestion occurs seek medical assistance and bring a sample of the fungus and a copy of the COSHH sheet with you to the doctors/hospital

### WHAT FURTHER ACTION IS NECESSARY TO CONTROL THE RISK?

What more could you reasonably do for those risks which you found were not adequately controlled?

- Remove the risk completely
- Try a less risky option
- Prevent access to the hazard (e.g. by guarding)
- Organise work to reduce exposure to the hazard
- Issue personal protective equipment
- Provide welfare facilities (e.g. washing facilities for removal of contamination and first-aid)

List the risks which are not adequately controlled and the action you will take where it is reasonably practicable to do more. You are entitled to take cost into account, unless the risk is high:			

Service:	
<b>Activity Details:</b>	EXPERIMENTING WITH FUNGI
Date:	
	APPENDIX 5 PAGE 3 OF 5

Have you already taken precautions against the risks from the hazards you listed? For example, have you provided:-

- Adequate information, instruction or training?
- Adequate systems or procedures?

Do the precautions:-

 Meet the standards set by a legal requirement? Comply with a recognised industry standard? Represent good practice?
 Reduce risk as far as reasonably practicable?

If so, then the risks are adequately controlled, but you need to indicate the precautions you have in place. Refer to your generic risk assessment manual.

### List existing controls here or note where the information may be found: 6 Class participation P4-7 supervised activity Refer to the activity sheet and the general instructions (Health and Safety) Follow the Scottish Office instruction on farm visits 7 Disposal Chemical destruction as described in the Health and safety section using marogold gloves and Microsol, Virkon or Bleach. (see COSHH sheets) Double wrap all material and place in the outside bin 8 Teacher only activity use a sharp vegetable knife and vegetable board. Ensure equipment is washed before returning to store. 9 Chemicals Microsol (see manufactures safety notes) Virkon (see manufactures safety notes) Bleach (see enclosed COSHH sheet) 10 Hygiene Wash hands after the activity

### WHAT FURTHER ACTION IS NECESSARY TO CONTROL THE RISK?

What more could you reasonably do for those risks which you found were not adequately controlled?

- Remove the risk completely
- Try a less risky option
- Prevent access to the hazard (e.g. by guarding)
- Organise work to reduce exposure to the hazard
- Issue personal protective equipment
- Provide welfare facilities (e.g. washing facilities for removal of contamination and first-aid)

List the risks which are not adequately controlled and the action you will take where it is reasonably practicable to do more. You are entitled to take cost into account, unless the risk is high:					
Risk rating with all controls in place					
High		Med		Low	X



### COUNCIL CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH - ASSESSMENT

COMPILED BY: DATE:

	SUBSTANCES USED	WORK ACTIVITY AND END PRODUCTS	
BLEACH (	BLUE RAM)	Disinfection	
Composition Sodium Hypochlorite solution			
	HAZARDS IDENTIFIED	PERSONS AT RISK	
Stability	Corrosive, oxidising agent	Staff, Third parties, Cleaners, Ground maintenance	
Eyes:	Sever irritant may cause permanent damage		
Skin:	Irritant		
Ingestion:	Sever irritant / toxic		
Inhalation:			
	STORAGE	SPILLAGE	
Store in orig	inal containers, upright in a cool dry place	Dilute with copious amounts of water and flush to drain	
Avoid sunlig	ght and extremes of temperature	Do not permit to enter water courses or ponds	
	te from other chemicals especially acids give off if mixed with acid	Wash out empty containers and dispose as normal waste	
Keep out of	children's reach		
	FIRS	ΓAID	
Eyes:	Flush the copious amounts of water, see	k immediate medical assistance	
Skin:	Wash off		
Ingestion:	Seek medical assistance treat as chloring	e poisoning	
Inhalation:	Remove to fresh air		
	CONT	ROLS	
Teacher only	y use, use marigold gloves and consider eye p	rotection	
Dilute to manufactures recommendations			
Signature:		Date:	
-		Review Date:	

APPENDIX 5 PAGE 5 OF 5

QUANTITIES US	SED	METHODS C	F EXPOSURE
LARGE MEDIUM SMALL		INHALATION ABSORBED/SKIN SWALLOWED	YES NO  X  X
EXPOSURE			
	DAYS HIGH	HOURS MEDIUM	MINUTES LOW
ARE THERE MELS/OES FOR TH	IE SUBSTANCES	YES No	$o \square$
IS THERE A NEED TO MONITO	R/MEASURE EXPOS	URE YES NO	
IS THERE A NEED FOR HEALT.	H SURVEILLANCE	YES NO	
EXISTING/POTENTIAL EXPOSU	RE (Controls in place)	NO SIGNIFICANT	RISK
EXISTING/POTENTIAL EXPOSU	JRE ( Controls in place	e) SIGNIFICA	NT RISK
MEASURES TO PREVENT OR COL	NTROL EXPOSURE		
CHANGE WORK PROCESS  CHANGE CHEMICAL  VENTILATION  PPE (Marigold gloves)  PPE	YES NO  X  RESPIRATORY EYE FACE SKIN BODY		YES NO  X  X  Gety glasses or goggles
WHEN THIS SHEET IS COMPLETE	ED, DECIDE RISK TH	EN INSERT CONTROL MEAS	SURES IN FRONT PAGE

**COUNCIL** 

**RISK ASSESSMENT** 

**WORK SHEET** 

### THE GOOD, THE BAD AND THE FUNGI

**APPENDIX 6** 

MAKING PAPER WITH FUNGI



Service:	
Activity Details:	MAKING PAPER WITH FUNGI
Date:	7August 2002
	APPENDIX 6 PAGE 1 OF 3

#### **HAZARD**

Look only for hazards which you could reasonably expect to result in significant harm under the conditions in your workplace. Use the following list:-

Electrical 15. Animals Lifting and Moving 2. 16. 3. Chemicals 17. Violence Dusts/Fumes/Mists/Vapours Slips and Trips 18. **Biological Agents** 5. 19. Radiation Work Equipment and Its Use 20. Fire

General Environment 8. Display Screen Equipment and Workstations

Sharp Instruments Hot and Cold Surfaces 10. Pressurised Flammable Gas 11.

Systems Food Hygiene

Working From Height 13.

14. Noise

Outside Activities

Working Over or Near Water

22. Falling Objects Confined Spaces 23.

Excavations Working On Your Own 25.

26a. Projects/Experiments/Processes

26b. Workshops/Coaching Sessions Vehicle Interface

28. Pedestrian Traffic Routes

29. Driving

#### WHO MIGHT BE HARMED?

There is no need to list individuals by name - just think about groups of people doing similar work or who may be affected, e.g.:-

Office staff

Operators

Maintenance personnel

Cleaners

Contractors

Members of the public

People sharing your workplace

Pay particular attention to:-

Staff with disabilities

Inexperienced staff

Visitors

Lone workers

They may be more vulnerable

List hazards here:		
1	Collection	
2	Identification	
3	Poisons	
4	Allergy	
5	Ingestion	
6	Class participation	
7	Disposal	
8	Sharps	
9	Hygiene	

List grou	ps of peop	le who ar	e especially	y at risk f	rom the
significan	t hazards	which yo	u have ider	ntified:	

Service:	
Activity Details:	MAKING PAPER WITH FUNGI
Date:	
	APPENDIX 6 PAGE 2 OF 3

Have you already taken precautions against the risks from the hazards you listed? For example, have you provided:-

- Adequate information, instruction or training?
- Adequate systems or procedures?

Do the precautions:-

Meet the standards set by a legal requirement? Comply with a recognised industry standard? Represent good practice? Reduce risk as far as reasonably practicable?

If so, then the risks are adequately controlled, but you need to indicate the precautions you have in place. Refer to your generic risk assessment manual.

### List existing controls here or note where the information may be found:

1 Collection

> Collection from wild is a teacher managed activity (stock conservation)

S1+ activity

Seek landowners permission

Follow the Scottish Office instruction on farm visits

Follow the country code

Be aware of livestock

Ensue someone knows where you are

Fungi grow on rotten Birch trees caution required.

Younger fruit bodies are recommended

2 Identification

Follow the instructions as detailed for the activity

3 **Poisons** 

Follow the instructions on the activity sheet (low

Keep hands out of the mouth and avoid rubbing the eyes

Do not ingest

Wash hands

4 Allergies

Very slight risk of asthmatic irritation

5 Ingestion

No material to be eaten

If ingestion occurs seek medical assistance and bring a sample of the fungus with you to the doctors/hospital

### WHAT FURTHER ACTION IS NECESSARY TO **CONTROL THE RISK?**

What more could you reasonably do for those risks which you found were not adequately controlled?

- Remove the risk completely
- Try a less risky option
- Prevent access to the hazard (e.g. by guarding)
- Organise work to reduce exposure to the hazard
- Issue personal protective equipment
- Provide welfare facilities (e.g. washing facilities for removal of contamination and first-aid)

the action you practicable to d	will take where it is	ately controlled and reasonably ntitled to take cost into

Service:	
Activity Details:	MAKING PAPER WITH FUNGI
Date:	
	APPENDIX 6 PAGE 3 OF 3

Have you already taken precautions against the risks from the hazards you listed? For example, have you provided:-

- Adequate information, instruction or training?
- Adequate systems or procedures?

Do the precautions:-

 Meet the standards set by a legal requirement? Comply with a recognised industry standard? Represent good practice?
 Reduce risk as far as reasonably practicable?

If so, then the risks are adequately controlled, but you need to indicate the precautions you have in place. Refer to your generic risk assessment manual.

### List existing controls here or note where the information may be found:

- 6 Class participation
  Preparation ,Teacher only activity
  P4-7, S1+ activity
  Refer to the activity sheet and the general instructions (Health and Safety)
  Follow the Scottish Office instruction on farm visits
- Disposal
   Liquid flush down drain
   Solids double wrap all material and place in the outside bin
- 8 Sharps

Teacher only activity

Use a small saw, sharp vegetable knife and vegetable board to chop into pieces of approx one inch in size.

Then use a blender to reduce to curd Care is need as the blades are sharp. Disconnect the blender before adjusting the blades

Ensure the equipment is washed before returning to store.

1 Hygiene

Wash hands and equipment thoroughly

2

### WHAT FURTHER ACTION IS NECESSARY TO CONTROL THE RISK?

What more could you reasonably do for those risks which you found were not adequately controlled?

- Remove the risk completely
- Try a less risky option
- Prevent access to the hazard (e.g. by guarding)
- Organise work to reduce exposure to the hazard
- Issue personal protective equipment
- Provide welfare facilities (e.g. washing facilities for removal of contamination and first-aid)

List the risks which are not adequately controlled and the action you will take where it is reasonably practicable to do more. You are entitled to take cost into account, unless the risk is high:
Risk rating with all controls in place
High Med Low X

**COUNCIL** 

**RISK ASSESSMENT** 

**WORK SHEET** 

### THE GOOD, THE BAD AND THE FUNGI

**APPENDIX 7** 

**DYEING WOOL WITH FUNGI** 



Service:	
<b>Activity Details:</b>	DYING WOOL WITH FUNGI
Date:	7 August 2002
	APPENDIX 7 PAGE 1 OF 3

#### **HAZARD**

Look only for hazards which you could reasonably expect to result in significant harm under the conditions in your workplace. Use the following list:-

Electrical 15. Animals Lifting and Moving Outside Activities 2. 16. 3. Chemicals 17. Violence Dusts/Fumes/Mists/Vapours 4. Slips and Trips 18. 5. **Biological Agents** 19 Radiation Work Equipment and Its Use 20. General Environment Working Over or Near Water 21. Display Screen Equipment Falling Objects 8. 22. Confined Spaces and Workstations 23. Sharp Instruments Excavations 10. Hot and Cold Surfaces 25. Working On Your Own Pressurised Flammable Gas 26a. Projects/Experiments/Processes 11.

Systems 26b. Workshops/Coaching Sessions
12. Food Hygiene 27. Vehicle Interface
13. Working From Height 28. Pedestrian Traffic Routes
14. Noise 29. Driving

### WHO MIGHT BE HARMED?

There is no need to list individuals by name - just think about groups of people doing similar work or who may be affected, e.g.:-

Office staffMaintenance personnelOperatorsCleaners

Contractors • Members of the public

• People sharing your workplace

Pay particular attention to:-

Staff with disabilities

Visitors

• Inexperienced staff
• Lone workers

They may be more vulnerable

List hazards here:	
1	Collection
2	Identification
3	Poisons
4	Allergy
5	Ingestion
6	Class participation
7	Disposal
8	Sharps
9	Chemicals
10	Hygiene

List groups of people who are especially at risk from the	e
significant hazards which you have identified:	

Service:	
Activity Details:	DYING WOOL WITH FUNGI
Date:	
	APPENDIX 7 PAGE 2 OF 3

Have you already taken precautions against the risks from the hazards you listed? For example, have you provided:-

- Adequate information, instruction or training?
- Adequate systems or procedures?

Do the precautions:-

 Meet the standards set by a legal requirement? Comply with a recognised industry standard? Represent good practice?
 Reduce risk as far as reasonably practicable?

If so, then the risks are adequately controlled, but you need to indicate the precautions you have in place. Refer to your generic risk assessment manual.

List exi may be	sting controls here or note where the information found:
1	Collection Collection from wild is a teacher managed activity (stock conservation) S1+ activity Seek landowners permission Follow the Scottish Office instruction on farm visits Follow the country code Be aware of livestock Ensue someone knows where you are
2	Identification Follow the instructions as detailed for the activity
3	Poisons Follow the instructions on the activity sheet Do not ingest Keep hands out of the mouth and avoid rubbing the eyes Wash hands
4	Allergies Very slight risk of asthmatic irritation
5	Ingestion No material to be eaten If ingestion occurs seek medical assistance and bring a sample of the fungus with you to the doctors/hospital

### WHAT FURTHER ACTION IS NECESSARY TO CONTROL THE RISK?

What more could you reasonably do for those risks which you found were not adequately controlled?

- Remove the risk completely
- Try a less risky option
- Prevent access to the hazard (e.g. by guarding)
- Organise work to reduce exposure to the hazard
- Issue personal protective equipment
- Provide welfare facilities (e.g. washing facilities for removal of contamination and first-aid)

List the risks which are not adequately controlled and the action you will take where it is reasonably practicable to do more. You are entitled to take cost into account, unless the risk is high:						
Risk rating with all controls in place						
High	Med		Low	X		

Service:	
<b>Activity Details:</b>	DYING WOOL WITH FUNGI
Date:	
	APPENDIX 7 PAGE 3 OF 3

Have you already taken precautions against the risks from the hazards you listed? For example, have you provided:-

- Adequate information, instruction or training?
- Adequate systems or procedures?

Do the precautions:-

 Meet the standards set by a legal requirement? Comply with a recognised industry standard? Represent good practice?
 Reduce risk as far as reasonably practicable?

If so, then the risks are adequately controlled, but you need to indicate the precautions you have in place. Refer to your generic risk assessment manual.

### List existing controls here or note where the information may be found: 6 Class participation Teacher only activity (due to conservation implications) S1+ activity Refer to the activity sheet and the general instructions (Health and Safety) Follow the Scottish Office instruction on farm visits 7 Disposal Liquid flush down drain Solids double wrap all material and place in the outside bin 8 Sharps Teacher only activity use a sharp vegetable knife and vegetable board. Ensure they are washed before returning to store. 9 Hot surfaces / liquid Teacher activity only 10 Hygiene Wash hands and equipment after the activity

### WHAT FURTHER ACTION IS NECESSARY TO CONTROL THE RISK?

What more could you reasonably do for those risks which you found were not adequately controlled?

- Remove the risk completely
- Try a less risky option
- Prevent access to the hazard (e.g. by guarding)
- Organise work to reduce exposure to the hazard
- Issue personal protective equipment
- Provide welfare facilities (e.g. washing facilities for removal of contamination and first-aid)

List the risks which are not adequately controlled and the action you will take where it is reasonably practicable to do more. You are entitled to take cost into account, unless the risk is high:				
Risk rating with all controls in place				
High Med	Low X			

# THE GOOD, THE BAD AND THE FUNGI

## **APPENDIX 8**

# GUIDELINES FOR COLLECTING WILD FUNGI

### **Guidelines for collecting wild fungi:**

Collection is envisaged as a teacher only activity. Most habitats contain wild fungi but the fungi that are discussed below, in the section on identification, all grow in woodlands. When fungi grow with a particular species of tree this information is given in the notes. Obtaining the permission of the landowner and following the countryside and access codes are recommended. Other general guidelines are given in the 'Scottish Wild Mushroom Code' (Appendix 9) and in Appendix 11.

### Some useful tips for collecting fungi:

- Fungi mostly fruit during the late summer and autumn
- Fungi fruit most prolifically a few days after rain
- Take care to collect the base of the fungi sometimes the features of the base are important for identification.
- An old knife is useful to carefully extract the specimen, without damaging the substrate and mycelium.
- Once collected, store in an old margarine tub, brown paper bag or twist of greaseproof paper. **Do not** put into plastic bags, as this will speed the process of decomposition.
- Do not collect too far in advance (preferably the day before use) as picked mushrooms have a very limited 'shelf life'. Once collected store in a cool place an old fridge or cool box would be ideal. Bracket fungi tend to keep better than the soft-fleshed fungi.
- Many bracket fungi are very tough and particular care must be taken when removing them from their substrate.
- Toxins cannot be transferred through the skin.

### **Identification of fungi:**

Seeking expert opinion or consulting a good field guide will aid in the identification of fungi. Recommended field guides include 'Mushrooms and other fungi of Great Britain and Europe' by Roger Phillips (ISBN 0 330 26441 9) and 'How to identify edible mushrooms' by Patrick Harding, Tony Lyon and Gill Tomblin (ISBN 0 00 219984 X). There are no foolproof rules to distinguish between edible and poisonous fungi.

The following is an aid to identifying a range of fungi that are mentioned in the above activities and that are reasonably easy to identify. The Dyers' Mazegill (*Phaeolus schweinitzii*) is recommended for dying and the Hoof Fungus (*Fomes fomentarius*) and the Birch Polypore (*Piptoporus betulinus*) for paper making. None of the fungi illustrated are deadly and indication is given in the text where any members might cause gastric or other upset if ingested. Be aware that some people can suffer an allergic reaction to eating even shop bought fungi.

Remember that fungi can be very variable, particularly in size, and do not always look exactly like their photographs.

**Boletes:** these are 'umbrella' shaped fungi with a cap and stem that have pores underneath the cap rather than gills.

Boletes mostly produce a brown spore print and the caps come in a range of textures from viscid to suede like. Some boletes show dramatic colour changes when the flesh is cut or bruised. Sometimes bruising the pores will leave a blue finger print, but cutting the fungus in half is a good way to demonstrate a colour change. This change can be instantaneous in some species or take up to half an hour in others. Some do not change at all. The age and dryness of the fungus will affect the colour change. Different boletes grow with conifers and with broadleaves (particularly birch).



Bay Bolete (*Boletus* badius): bruising blue grey on small lemon coloured pores



Larch Bolete (Suillus grevillei): a lovely gooey texture to the cap of this one. Very common under larch.



Cep or Penny Bun (*Boletus edulis*): a dark cap and white raised network on the stipe are good identification features.

Most boletes are edible but Scarletina Bolete (*Boletus erythropus*) can cause gastric upset if ingested. This fungus does demonstrate the colour change of the flesh, very dramatically when damaged, from yellow to bright blue and if the health and safety guidelines are followed then this would make an interesting demonstration fungus. This fungus is easy to recognise as its stem is covered in orange/red dots.



Russulas: this is a large group of 'umbrella' shaped fungi with a cap and stem and gills underneath the cap. The cap colours tend to be very bright – reds, purples, yellows and greens but the gills and stem are often a strongly contrasting white. The flesh of Russulas has a slightly different microscopic composition to other fungi and consequently they have a 'cheesy / brittle' texture, noticeable if you crush the gills into the cap between thumb and forefinger. These fungi do not have rings around the stem or a volva at the base of the stem (appendix 12 'Identifying Fungi – What To Look For'). The spore prints vary from white to orange. Some Russulas have interesting smells (e.g. Geranium Brittlegill *Russula fellea* – a yellowy Russula growing underneath beech trees has a smell likened to stewed apple or some species of geranium).



**Russula paludosa**: has a pale pink tinge on the stipe.



Primrose Brittlegill (Russula sardonia): has lemon yellow gills when young and a very hot taste



Copper Brittlegill (Russula decolorans): grows in pine woods and discolours black where damaged



Some Russulas have ochre and green tints.

Some Russulas taste peppery hot; this in itself is not connected with toxicity but we do not recommend that you taste any fungi in the classroom situation. Many Russulas are edible but those with bright red caps and pure white stems and gills cause gastric upsets.



The Sickener (Russula emetica): causes stomach upsets

Lactarius: this is a group of 'umbrella' shaped fungi with a cap and stem and gills underneath the cap. The cap colours are often dull but when damaged the flesh will produce a milky substance. This milk can sometimes change colour once it is exposed to the air and in 'Lactarius uvidus' the white milk turns violet. Some species of Lactarius produce milk that tastes peppery hot; this in itself is not connected with toxicity but we do not recommend that you taste any fungi in the classroom situation. Care should be taken not to introduce the milk into the mouth or eyes. Some Lactarius have interesting smells including Coconut Milkcap (Lactarius glyciosmus) growing with birch that smells of coconut and Fenugreek Milkcap (Lactarius helvus) growing with conifers that smells of curry powder.



**Grey Milkcap** (*Lactarius vietus*): produces white milk. The concentric zoning is often a character of Lactarius species.



The Fly Agaric (*Amanita muscaria*): this is the 'classic' red-capped fungus with white spots, gills, a ring and a volva. It appears in many children's fairy stories, including 'Alice in Wonderland' and provides one of the rare examples of a toadstool being used in our folklore. It is a beautiful fungus that also illustrates many of the characters shown in the worksheet 'Identifying Fungi – What To Look For' (appendix 12). These features make this an interesting fungus to use for demonstrations in class. Particular care should be taken when working with this fungus as it contains two toxins, one that causes hallucinations and the other that causes sweating and gastric upset. If the health and safety guidelines are followed then the fungus can be quite safely used.





Fly Agaric (Amanita muscaria)



**Dyer's Mazegill** (*Phaeolus schweinitzii*): this usually appears on the ground or near the base of a living conifer tree. At first it has a bright yellow velvety appearance. The yellow bruises dark violaceus black and the whole fruit body will eventually darken. It can be used for making dyes - Activity 9



**The Hoof Fungus** (*Fomes fomentarius*): this is a perennial fungus that grows on old birch trees, often in the shape of a hoof. It is usually grey and is always hard. It can be used in Activity 8.







**Birch Polypore** (*Piptoporus betulinus*): this is an annual fungus that grows on old birch trees. When it is young (late summer, early autumn) it is pale and firmly rubbery. This fungus will rot during the winter. It can be used in Activity 8.





Photos Liz Holden

## **APPENDIX 9**

# SCOTTISH WILD MUSHROOM CODE

### The Scottish Wild Mushroom Code

The countryside is a working landscape. Please be aware of safety and follow the countryside and access codes. In accordance with these codes, and as a matter of courtesy you are advised to ask for permission before you pick mushrooms.

By respecting the natural environment you can help to manage and conserve the countryside.

When picking mushrooms for any purpose, please consider the following points:

- Wildlife, especially insects need mushrooms too, so only pick what you will use.
- Do not pick mushrooms until the cap has opened out and leave those that are past their best.
- The main part of the mushroom is below the surface, take care not to damage or trample it, and not to disturb its surroundings.
- Scatter trimmings discreetly in the same area as the mushrooms came from.
- Some mushrooms are poisonous and others rare and should not be picked – only pick what you know and take a field guide with you to identify mushrooms where you find them.
- Before you collect mushrooms at a nature reserve please always seek advice from the manager, as special conditions may apply.

If you own or manage land:

- Be aware that your management activities may affect mushrooms. If you wish to run a foray or collect for scientific purposes:
  - In order to ensure the safely of your party obtain permission in writing.
  - Give a record of what you have found to the landowner or manager and explain the significance of your findings.

This code was created by the Scottish Wild Mushroom forum, a group consisting of representatives of conservation organisations, landowners, public landowning bodies, mushroom buyers and mushroom pickers. The creation of the Forum and the code was funded by Scottish Natural Heritage, The Millenium Forest for Scotland Trust and Moray, Badenoch and Strathspey Enterprise.

# APPENDIX 10 OUTINGS SUPERVISION

**OUTINGS: APPENDIX 10 PAGE 1 OF 1** 

### **Aberdeenshire Nurseries**

When ever possible pre-school children should be given the opportunity to play out of doors.

All children benefit from educational outings as this extends their knowledge of the world.

Supervisory levels should be

- Five children to one adult (5 : 1). There must always be at least two adults with the group to cope with emergencies.
- Three children to one adult (3 : 1) or less if there are special needs children present. NB supervision may need to be one to one in some situations
- Pre-nursery in schools the ratio of staff to students is 1 : 10 but The Commission for Care is presently considering 1 : 6. In private nurseries the ratio is much lower at 1 : 4.

Nursery floor area is 2.7 m<sup>2</sup> for each child up to 20, 2.2 m<sup>2</sup> for each child over 20

### **Primary Outings**

Curriculum related		No overnight	Overnight
Pre-nursery	1:4	•	
Nursery	1:5	1:5	*
P1-P3	1:10	1:10	*
P4-P7	1:15	1:15	1:12
Secondary	1:30	1:20	1:20

Pre-nursery in schools the ratio of staff to students is 1:10 but The Commission for Care is presently considering 1:6. In private nurseries the ratio is much lower at 1:4

### **Scottish Office Recommendations (Farm Visits)**

Scottish Centre for Infection and Environmental Health (Farms) (2002)

One year	1:1
Two year	1:2
Three years	1:3
3-5 years	1:4
5-8 years	1:8

**APPENDIX 11** 

SCOTTISH CENTRE FOR INFECTION AND ENVIRONMENTAL HEALTH

**GUIDANCE NOTES SERIES** 

E. COLI 0157 AND OPEN FARMS

### **BACKGROUND**

Visits to farms are recognised as an enjoyable experience for all age groups. In particular, children benefit from the experience and should be encouraged to visit open farms to learn about rural life and experience contact with animals. This guidance provides advice on protective practices aimed at reducing the risk of ill health associated with open farms and compliments the general guidance contained in Guidance Note: *E. coli* O157:H7, GN 5 - 02/2000.

### **HEALTH RISKS**

All animals naturally carry a range of micro-organisms, some of which can be transmitted to humans, where they may cause ill health. *Escherichia coli* O157 (*E. coli* O157) is an example of a micro-organism that may be contracted on farms. This organism has little or no effect on the health of animals and they show no signs of illness or distress.

*E. coli* O157 however, poses a serious hazard to humans with those particularly at risk being the very young, the very old and the immuno-suppressed. The infection is the major cause of renal failure in children in the UK.

The infective dose of *E. coli* O157 is considered to be very low and is transmitted to humans by the consumption of contaminated foods or water, person-to-person spread or contact with infected animals or their faeces.

Consequently current veterinary and medical opinion is that it is reasonable and advisable for farmers to assume that all ruminants (cattle, sheep, goats and deer) carry *E. coli* O157. The organism has been found in a range of other animals including geese and seagulls.

There are no tests in the live animal to conclusively prove that it is free of *E. coli* O157 infection, therefore it must be assumed that farm-associated animals are likely to be infected by this organism. On this basis, control measures introduced should be aimed at reducing the potential risk to those who choose to visit open farms.

### **LEGISLATIVE POSITION**

- Employers have a responsibility under Sections 2 and 3 of the Health & Safety at Work etc Act 1974 and in particular, responsibility in relation to The Management of Health & Safety at Work Regulations 1992 (SI 1992 No 2051).
- In terms of The Control of Substances Hazardous to Health Regulations 1999 (SI 1999 No 437) there is a responsibility on the employer to carry out a risk assessment on the exposure to hazardous materials including micro-organisms.
- Section 2 of the Occupiers Liability (Scotland) Act 1960 places a duty on the occupier of land to take reasonable care for the safety of, 'a person entering thereon in respect of dangers which are due to the state of the premises or to anything done or omitted to be done on them'.
- As a form of food poisoning, cases of *E coli* O157 are notifiable in terms of The Public Health (Notification of Infectious Diseases) (Scotland) Regulations 1988 and 1989 (SI 1988 No 1550) (SI 1989 No 2250).
- When food is produced and sold on the premises the occupier has a responsibility to comply with the Food Safety Act 1990 and the Food Safety (General Food Hygiene) Regulations 1995 (SI 1995 No 1763).
- The Food Safety (General Food Hygiene) Regulations 1995 (SI 1995 No 1763) implements the provisions of Council Directive 80/778/EEC relating to the quality of water intended for human consumption for food production purposes. Regulation 2 sets the quality standard for food used for food production purposes.
- Section 3 of The Private Water Supplies (Scotland) Regulations 1992 (SI 1992 No 575) (Amended SI 1998 No 1856) refers to the need to provide a wholesome water supply.
- In addition to the above requirements, local education authorities, private school governors etc will be under a common law duty to ensure that children in their care are reasonable safe whilst visiting any farm.



### PRINCIPLES OF GOOD PRACTICE

Visitors to farms are most likely to become infected with *E coli* O157 from direct or indirect contact with animals or their faeces. Possible routes include:

- Contact with animals in petting areas or during bottle-feeding.
- Touching gates or animal pen divisions contaminated with faeces.
- Walking through areas grossly contaminated with faeces.
- Putting fingers or items into the mouth e.g. smoking, eating, dummies etc.

### **ADVICE FOR FARMERS**

Farmers and others responsible for farms open to the public should be advised to introduce the following measures to reduce the potential for spread of infection.

### Farm layout and visitor routes

A visitor route requires to be organised around the farm that ensures visitors are diverted away from restricted areas e.g. parts of the farm where work is going on. There should be no access to restricted areas, preferably separated by an adequate barrier such as fencing.

### Animal contact

Animals, that farm visitors are able to pet, handle and feed, require to be specifically identified. Animal contact areas require be kept free from any build up of faeces. Contact areas within animal housing require to be kept clean, including pen divisions and gates etc. Contact areas should be cleaned whenever animals are moved in or out of them.

### • Refreshment areas

Visitors should be prohibited from eating (including sweets), drinking or smoking within the animal contact areas and should only be allowed in a designated refreshment area.

Washing facilities require to be provided at the entrance to the designated refreshment areas and all visitors should be advised to wash their hands before the consumption of food or drink. Designated refreshment areas require to be sited away from animal contact areas.

All animals, including domesticated fowl, farm dogs etc, require to be excluded from the refreshment areas. Any discarded foodstuffs should be cleared from the refreshment areas to discourage wild birds from feeding and contaminating the area.

Kiosks for the selling of sweets, ice creams etc require to be sited in the 'clean' area of the farm, such as within the designated refreshment area. Visitors should be reminded, verbally and by notices, to wash their hands before touching or eating purchased food or sweets.

### Washing facilities

All open farms, especially those where visitors are encouraged to have contact with animals, require to provide adequate washing facilities. Permanent washing facilities may require to be supplemented with additional temporary facilities during busy times of the year. Washing facilities can, for example, be individual basins, or troughs with a number of running water outlets.

Washing facilities require to be accessible to all visitors and may require to provide a raised standing area for children. All washing facilities must provide running water, liquid soap (bactericidal soap is not necessary) and a means of drying hands using hot-air hand dryers, or paper towels.

Visitors require to be directed to washing facilities after having intentional contact with animals i.e. petting barns, before accessing designated refreshment areas and before leaving the farm.

Young children must be supervised during hand washing to ensure it is carried out in a hygienic manner.



### Water supply

The water supply to the open farm may be from the mains water supply or a private water source such as a spring, well, borehole, loch or stream. The use of a private water supply is common in the remote parts of the country.

If private water supplies are not protected they can become polluted from a range of activities associated with the operation of farms. These include 'run-off' from manure or compost heaps, effluent discharges from slurry and septic tanks and contamination of the 'catchment area' from grazing livestock.

Particular care should be taken to ensure that grazing livestock are not in close proximity to the source and the distribution network of the supply.

Standards relating to water quality are the responsibility of the occupier and advice can be obtained from the local environmental health department.

### • Information and signs

Notices require to be provided at all entrances to the premises advising visitors of the need for good hygiene and requesting they can eat and drink only in the designated areas. Additional information requires to be provided at appropriate places advising visitors to the need to wash their hands after contact with animals, along with providing instructions on how to wash hands properly. Parents of young children should be advised that dummies or toys that fall to the ground should not be used again until thoroughly cleaned. Additional guidance for visitors highlighting further precautionary measures would be beneficial.

### • Training and supervision

Farm staff must be available to provide an adequate level of supervision, not least to protect the animals and ensure their welfare. Farm staff require to be trained and instructed on what visitors should or should not do during their visit.

All parties of nursery or school age children require to be accompanied by a minimum number of supervisory staff; the level of supervision is outlined below. While it is the responsibility of teachers and parents to make sure children wash their hands thoroughly, in some instances farm staff may need to assist in their supervision.

### Farm management and husbandry

The farm requires to be kept as clean as practicable, with areas that visitors have access being kept free from any build up of faeces.

Animals require to be kept as clean as possible and in clean conditions. Any animals showing signs of illness or stress should be removed from animal contact areas. Similarly, those animals that have just given birth or been born must not be put in to animal contact areas. If replacement stock requires to be bought in, these animals must be isolated from the other animals on the farm for a minimum of one month.

Manure, compost heaps and other waste deposits require to be sited away from visitor access areas or fenced off. If this is not possible, visitors should be prevented from coming into contact with the manure, compost or liquid runoff

Visitors should not be allowed to bag compost. If however, farms wish to supply bagged compost for domestic use, visitors require to be made aware of the need to wash their hands after using the material at home.

Tools and implements used on the farm require to be regularly cleaned.

### **REFERENCES**

Health and Safety Executive. Avoiding ill-health at open farms – advice to farmers (with teachers supplement). Agriculture Information sheet 23 (revised). HMSO, 2000.

Task Force on E. coli O157 Final Report, June 2001



### **GUIDANCE FOR TEACHERS**

Teachers and others involved in organising visits to farms require to provide an adequate level of instruction and supervision for children in their care and should introduce the following measures to minimise the risk of spread of infection.

### · Arranging a visit to an open farm

Facilities available at the open farm require to comply with the requirements outlined above. Arrangements for the visit must be discussed and agreed in advance of the visit with those in charge of the farm.

### Parental consent

Plans for a trip to a farm should be discussed in advance with parents and parental consent sought. Parents should be advised of the small but potential risk posed to their child from undertaking such a visit, in particular the potential of contracting *E. coli* O157 infection.

Age of children	Recommended minimum level of supervision (Supervisor: number of children)
<1 year	1:1
1 year to < 2 years	1:2
2 years to < 3 years	1:3
3 years to < 5 years	1:4
5 years to 8 years	1:8

### Level of supervision

As a general rule the following minimum level of supervision requires to be provided for visits to open farms:

If supervision levels are less than stated above, there should be no direct contact with animals for children under eight. A supervisor is considered as either a staff member of the school or crèche etc, or parent/guardian of a child.

Where direct contact with farm animals is possible, children under 5 years of age are at greater risk and may need to be carried or more closely supervised.

Supervisors require to be advised of their duties in advance of the proposed visit. Supervisors must ensure children wash their hands thoroughly and provide assistance when needed.

Children require to be encouraged to stay in their allocated group to assist in their supervision during the visit.

### · Instructions for parents and children

Children must be advised of the rules for the visit. Children must not consume food or drink outside the designated refreshment areas. Children require to understand the need to wash hands thoroughly and when they are required to do so.

The parent or guardian of a child should be advised of the need to provide appropriate clothing, including sturdy outdoor shoes (not sandals) or wellington boots if possible for visiting an open farm. Also, any cuts, grazes etc on the child's hands require to be suitably covered with a waterproof dressing.

### • Personal hygiene

Children require to be given proper instruction on when to wash their hands. When required, children must be given assistance in washing their hands thoroughly.

### Contact with animals

Children require to be discouraged from kissing animals. Children also require to be discouraged putting their fingers, pens, pencils or crayons etc in their mouths.

### • Contact with farm environment

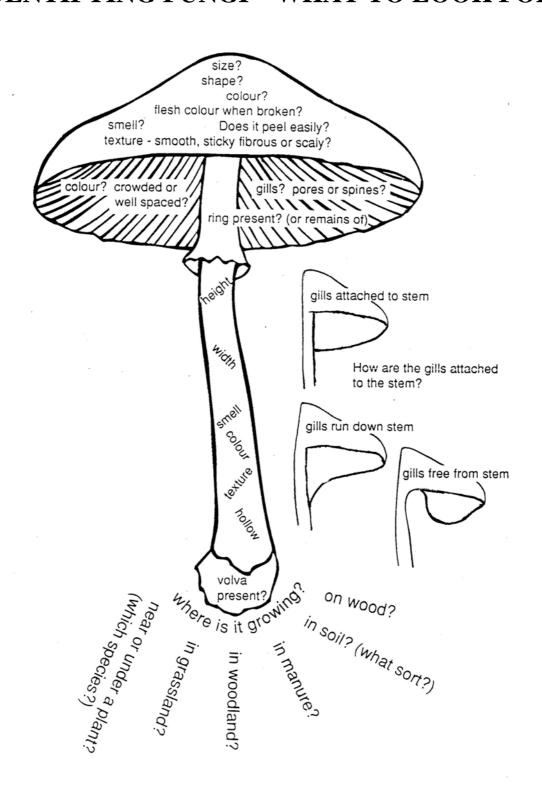
Children require to clean or change their footwear before leaving the farm environment, and must be instructed to wash their hands after any contact with animal faeces on their footwear.

### Reported illness

Any signs of illness (e.g. sickness or diarrhoea) occurring after a visit to an open farm requires to be reported to their GP. The GP should be advised of recent contact with farm-associated animals.



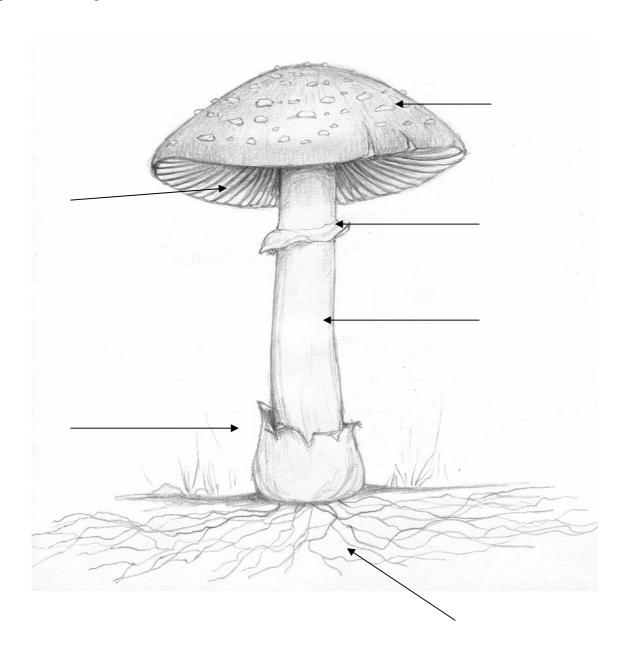
### APPENDIX 12 CLASSROOM WORKSHEET IDENTIFYING FUNGI – WHAT TO LOOK FOR



# APPENDIX 13 CLASSROOM WORKSHEET PARTS OF A FUNGUS

### Parts of a Fungus

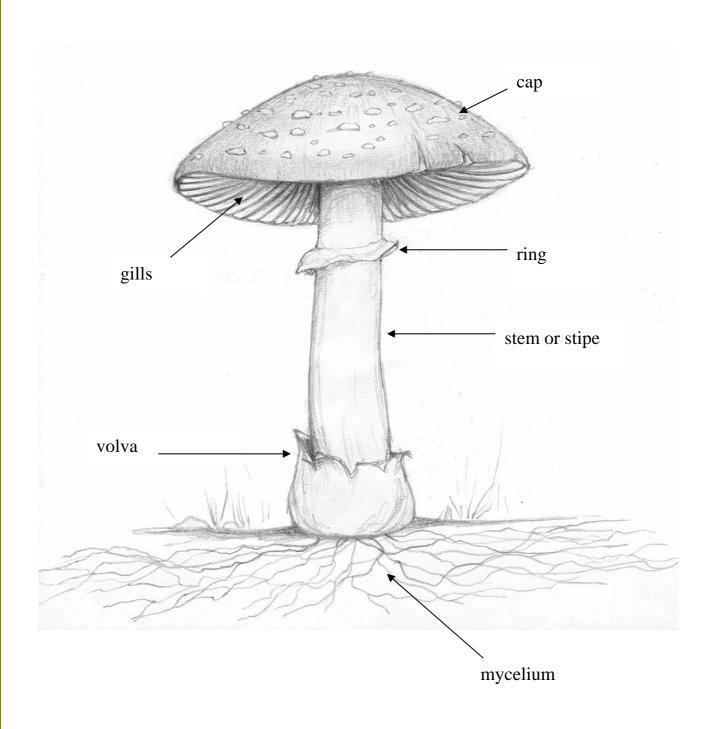
The words below tell you about the parts of a fungus. Can you choose one of these words for each part of this fungus?



 stem or stipe
 volva
 cap

 mycelium
 gills
 ring

### Parts of a Fungus correctly labelled



# **APPENDIX 14**

# CLASSROOM WORKSHEET

# UNDERSTANDING FUNGI IN UNDERSTANDING FUNGI / THE FOREST

Understandi	rig Furigi   Classi
Join the descriptions to the fungus by drawing	Class:
a line between them.	School:
The line for the cap has been done for you.	
Complete the sentences.	5/070/3
The cap	0.0
The <b>cap</b> supports and protects the	e of Amaria
or which are where the spores are	
produced.	
	Gills
	Gills or pores grow under the
Ring	cap and produce
A partial veil grows from the edge of the	To produce, protect and scatter
cap to the stem, the <b>ring</b> is what is left on	the spores is why the toadstool
the as the cap grows and breaks	grows.
the	
The veil provided extra protection for the	□ The volva
spores when the toadstool was young.	If the fungus has a universal veil, the volva
	is what is left of the veil at the bottom of
	the stem when the veil is broken.
Stem or stipe	the stern when the veirle broken.
The <b>stem</b> or stipe has to hold up the	The veil is broken as the toadstool .
So that when the spores drop	This veil sometimes leaves on the
down they are high enough off the	cap as well.
to drift away.	
	How many differences can you think of between a fungus
Mycelium	and a flowering plant? Write some down here:
and the second of the second o	
The <b>mycelium</b> is the hidden 'body' of the fungus. It finds for the fungus and	
when conditions are suitable it is able to	The second second
produce a .	
P. 64466 4	

# Understanding Fungi

Join the descriptions to the fungus by drawing a line between them.

The line for the cap has been done for you. Complete the sentences.

### The cap -

The **cap** supports and protects the **gills** or **pores** which are where the spores are produced.

### Ring

A partial veil grows from the edge of the cap to the stem, the **ring** is what is left on the **stem** as the cap grows and breaks the **veil**.

The veil provided extra protection for the spores when the toadstool was young.

### Stem or stipe

The **stem** or stipe has to hold up the <u>Cap</u> So that when the spores drop down they are high enough off the <u>ground</u> to drift away.

### Mycelium

The **mycelium** is the hidden 'body' of the fungus. It finds <u>food</u> for the fungus and when conditions are suitable it is able to produce a **toadstool**.

### Gills

**Gills** or **pores** grow under the cap and produce **Spores**. To produce, protect and scatter the spores is why the toadstool grows.

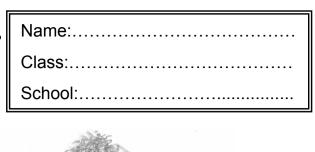
### The volva

If the fungus has a universal veil, the **volva** is what is left of the veil at the bottom of the stem when the veil is broken.

The veil is broken as the toadstool <u>grows</u>
This veil sometimes leaves <u>spots</u> on the cap as well.

How many differences can you think of between a fungus and a flowering plant? Write some down here:

# Understanding Fungi in the Forest



Fungi are in the woodland all the time. Why don't we see them most of the time?

There are three ways that woodland fungi get their food.

Can you name them?

How do exchanger fungi link up to their tree?

How does the exchanger

When is a parasitic fungus able to infect a tree?

A parasite can kill a tree. How can the death of a tree be a good thing in the forest?

What did we use to help us try and

identify some toadstools?

fungus help the tree?

Can you think of two reasons why recycler fungi are important in the forest? Autumn is a good time for recycler fungi; can you think why?

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**APPENDIX 15** 

CLASSROOM WORKSHEET

**FUNGI AND FOOD CHAINS** 

appendix 15 page 1 of 1	
Fungi and Food Chains	Name:
Turigi uria i oca criaris	Class:
	School:
Several different animals appear in these	
diagrams. Can you find them?	
Can you make at least TWO different food	
chains, starting with the sun and including a toadstool?	
	302/ 12 market and the state of
Can you name some woodland creatures that either eat or live in fu	ıngi?
What was a second of the secon	
	M. Marie M. M. Marie M.



