

**KEY TO "FIELD GUIDE TO WILD MUSHROOMS OF PENNSYLVANIA  
AND THE MID-ATLANTIC" by Bill Russell**

Because of modern investigative techniques, some of the Field Guide's 10 year old information is now considered to be incorrect and outdated. To avoid confusion, this key maintains the book's original information.

Species marked with \* are fully described in the Guide.

**THE KEY**

**I MUSHROOMS WITH GILLS UNDERNEATH THE CAP:**

**BLACK** spore print. - **A**

**BROWN** (including dark tan and rusty tints) spore print. - **B**

**PINK** spore print. - **C**

**PURPLE** (including purplish-brown and purplish-black) spore print. - **D**

**WHITE** (including pale pastel shades of pink, lavender, yellow, etc.) spore print. - **E**

**GREEN** spore print. - **F**

**II MUSHROOMS WITHOUT GILLS: - G**

**A: Gilled mushrooms with BLACK spore prints.**

**1** Mushroom soon self-digests into a black goop. - **2**

**1** Does not soon digest into black goop. - **5**

**2** Grows on the ground in lawns and grassy places. - **3**

**2** Grows on dead wood. - **4**

**3** Gray-brown cap, the size and shape of hen's eggs. With distinct, fine radial lines near edge of cap. Grows in clusters in grassy places. - *Coprinus atramentarius*\* p.190

**3** Up to 3" tall, oblong, shaggy, white caps without distinct grooves. Grows in groups, late in the season, mainly October. - *Coprinus comatus*\* p.152

**4** Grows on stumps of broadleaved trees. Resembles *Coprinus comatus*, but with a smaller cap that shows radial lines, and few scales that soon flake off. Rare. - *Coprinus insignis*

**4** Grows in large clusters, mainly on dead ash and elm. Cap with flaking patches, exposing a bald surface. Often has a strong odor. - *Coprinus variegatus*\* p.24

**5** Cap small, not over 3/8" across. Grows in dense masses on decaying wood. Cap brownish-gray, bell-shaped, and grooved. Skinny stem. - *Coprinus disseminatus*

**5** Cap 4" across or wider. - **6**

**6** Cap up to 15" across. Purple-brown cap. White stem with two-layered rough and torn ring. Grows in woodchip mulch. Most frequent in spring. - *Stropharia rugosoannulata*\* p.25

**6** Cap not over 4" across. Hairy stem. - **7**

**7** Fragile, hairy, brownish cap, with a thin fringe along the edge. Gills deep brown, and spotted. - *Psathyrella velutina*\* p.52

7 Similar to *Psathyrella velutina*, but cap whiter, and covered with dark fuzzy patches. - *Psathyrella maculata*

7 Similar to *Psathyrella velutina*, but cap is more orange-colored. - *Psathyrella rigidipes*

**B: Gilled mushrooms with BROWN spore prints (including dark tan and rusty tints).**

1 Grows on the ground in grassy places. Spores chocolate-brown to dark brown - 2

1 Gills attached to the stem. Spores rusty-brown to cinnamon-brown - 6

2 Little brown mushroom with a long, skinny, ring-free stem. Stem not over 1/4" thick. Cap often 2-toned, and up to 1 1/4" wide. Gills more or less attached to the stem: *Panaeolus foenisecii*\* p.30

2 Bigger mushroom; not very tall & skinny. With a white to pale tan cap and stem - 3

3 Stem without a ring. Soon dissolves into a dark goop. Grows in clumps and patches at the base of trees and dead stumps, and anywhere from buried wood. Tan, fragile, small egg-shaped cap, at first covered with little particles that seem to glisten in the sun. Appears from early April and on - *Coprinus micaceus*\* p.29

3 Stem with a ring - 4

4 Gills not attached to the stem. White cap; surface typically not cracking with age - 5

4 Gills attached to the stem. White to whitish-tan, smooth cap surface, often cracking in age. Often grows with wood chips - *Agrocybe dura*\* p.27

5 Gills pink when young, becoming brown. Stem with a simple ring, Cap up to 4" across; smooth - *Agaricus campestris*\* 55

5 Gills whitish when young, not pink; becoming brown. Stem with a large, elaborate ring that shows a toothed gear pattern as the cap expands. Cap can be huge, up to over 12" wide. Grows in grassy places - *Agaricus arvensis*\* p. 53

6 Grows on the ground - 7

6 Grows on wood in clusters. Stem with a ring - 11

7 Little brown mushroom with a long, skinny stem with a large ring half way down the stem. Stem 1/16" or less thick. Cap not over 1" wide. Grows in grassy places, often with wood chips. - *Conocybe filaris*

7 Bigger mushrooms; not very tall and skinny. Show a cobbwebby veil between stem and cap when young. Usually grow under oak and other hardwoods, but sometimes under conifer trees - 8

8 With bright reddish scales or bright reddish bands. Dry - 9

8 No reddish scales or reddish bands - 10

9 Reddish-brown mushroom with irregular reddish bands on a club-shaped stem - *Cortinarius armillatus*\* p.57

9 Cap and stem covered with reddish scales. Stem not club-shaped; usually shows a rusty ring zone above the scales. Stem stains rusty-orange to red near the base when bruised - *Cortinarius bolaris*\* p.153

10 Uniform rusty color. Dry. Rare. - *Cortinarius orellanus*

10 Slimy, purplish cap that develops yellow dots near the center. Purplish gills that become rusty colored. - *Cortinarius iodes*\* p.58

11 Cap smooth, small; rarely over 2 1/2" wide. Brownish cap may fade with age. Stem with a vague ring. Often grows in small clusters. - *Galerina autumnalis*\* p.155

11 Cap distinctly scaly, up to 5" wide - 12

12 Cap dry, often with a garlicky odor. Gills become greenish with age - *Pholiota squarrossa*\* 191

12 Cap sticky, without a garlicky odor. Gills do not become greenish with age - *Pholiota squarrossoides*

**C: Gilled mushrooms with PINK spore prints** - All with no ring on the stem.

1 Gills attached to the stem, and run down it. Grows on the ground. Grayish-brown cap. Pinkish gills. White stem. Usually found along with whitish to pinkish irregular roundish forms. - *Entoloma abortivum*\* p.60

1 Gills not attached to the stem. Grows on rotting wood. Large cap, up to about 5" wide. Whitish stem. Gills white, becoming salmon-pink in age. - 2

2 Smooth, light brown to grayish-brown cap. - *Pluteus cervinus*\* p.32

2 Dark brown, wrinkled cap. - *Pluteus magnus*

**D: Gilled mushrooms with PURPLE spore prints (including purplish-brown and purplish-black)**

All with gills attached to the stem.

1 Grows on rotting wood, in clusters. Smooth, dome shaped cap. - 2

1 Grows on the ground in groups. Fragile mushroom with a thin, pale to dark honey-yellow cap that shows delicate tissue patches hanging from the edge when young. Thin, hollow, brittle, delicate stem without a ring. Often grows around rotting stumps. - *Psathyrella candolleana*\* p.34

2 Gills with greenish-yellow tint. Yellow cap. Bitter taste. Grows mainly on conifer, rarely hardwood. - *Naematoloma fasciculare*

2 Gills without greenish-yellow tint. Cap not yellow. - 3

3 Cap brick-red. Gills whitish, turning grayish-purple. On hardwood. - *Naematoloma sublateritium*\* p.193

3 Cap orange. Gills grayish-brown, becoming purple-brown. Grows on conifer wood. - *Naematoloma capnoides*

**E: Gilled mushrooms with WHITE spore prints (including pale pastel shades of pink, lavender, yellow, etc.)**

1 Ground-growing mushrooms that drip or ooze a milky-white, or colored, or clear watery juice. Caps over 2" across. - 2

1 Mushroom does not ooze milk or juice. - 7

2 Milk white, unchanging color. - 3

2 Milk colored; milk and/or bruised tissue becoming greenish. - 6

3 Milk tastes peppery-hot. Large white cap. - 4

3 Milk white, abundant, and tastes mild. Cap brown. - 5

4 Cap entirely covered with fuzz. - *Lactarius subvellereus*

4 Only the cap edge fuzzy. - *Lactarius deceptivus*

4 Cap smooth, and without fuzz. Gills very close. - *Lactarius piperatus*\* p.79

5 Gills widely spaced, do not become brown when bruised. - *Lactarius hygrophorides*

5 Gills close, dark yellowish to brownish. Turn brown when bruised. Cap wrinkled. *Lactarius corrugis*\* p.77

5 Gills close, Whitish. Become brown when bruised Cap smooth. With a fishy odor. - *Lactarius volemus*\* p.82

6 Milk at first bright blue. - *Lactarius indigo*\* p.78

6 Milk at first burgundy-red. - *Lactarius subpurpureus*\* p.81

6 Milk at first dark wine-brown. - *Lactarius paradoxus*

7 Stem with a ring. - 8

7 Stem without a ring. - 21

8 Grows on wood. Cap over 1" across. Stem with a cottony ring. Gills attached to the stem, and run down it. Cap honey-yellow. Grows in clusters on hardwood trees in autumn. Stem bases are tapered to points. - *Armillaria mellea*\* p.156

8 grows on the ground. - 9

9 Gills with a notch or depression at the stem. Cap orange, scaly, and sticky. White gills. Stem orange, with a ring, and scaly, with a white zone at the top. Mushroom has an unpleasant odor of rancid bread dough. - *Tricholoma zelleri*

9 Gills attached to stem. - 10

9 Gills not attached to stem. - 11

10 Usually with a disgusting odor, but may also be sweet-smelling. Cap with brownish scales. Stem white above the ring, but with brownish scales below. Gills white, developing brownish spots. - *Tricholoma caligatum*\* p.164

10 Very similar to *Tricholoma caligatum*, but all white, and stains brown where bruised. With a pleasant (to most people), but peculiar spicy odor. - *Armillaria ponderosa*

11 Stem base ornamented with a cup, scales, sheath, wrapper, etc. - 12

11 Stem base straight or swollen, smooth and plain, without ornamentation. Cap without distinct warts or thick cottony patches, but may not be smooth. Ring can be moved up and down on the stem. - 48

12 Stem with a scaly bulb at the base. White gills. - 14

12 Stem base set in a fleshy cup that's often hidden underground. - 17

12 Base of stem surrounded with a delicate, tissue paper-like sheath, or loose white sack that may be hidden underground. Radial lines along edge of cap. - 19

12 Stem base with a peculiar bulb that has a different decoration than above. Cap brownish with white to pale warts. - 20

14 Base of stem with reddish stains. - 15

14 Base of white stem without reddish stains. - 16

15 Cap reddish with tan, flaky warts. White gills with reddish stains. - *Amanita rubescens*\*

15 Cap golden yellow to brownish-yellow with yellowish warts. - *Amanita flavorubescens*

16 Cap yellow to orange, dotted with large, white cottage cheese-like spots. White gills and stem. - *Amanita muscaria*\* p.63

16 Yellow-orange cap with bright yellow to orange warts. - *Amanita flavoconia*

16 Bright orange cap with yellow to cream cottony patches. Bulb at base of stem has yellowish cottony patches. - *Amanita frostiana*.

17 Cap pale greenish; gills white. - *Amanita phalloides*\*

17 Cap bright red to orange. Gills yellow to orange-yellow. - *Amanita caesarea*\* p.61

17 Entirely white mushroom. - 18

- 18 Stem with a rough cottony surface. - *Amanita virosa*\* p.67
- 18 Stem smooth.- *Amanita verna*
- 18 Very similar to *Amanita verna*, but typically smaller. - *Amanita bisporigera*
- 19 Cap gray to grayish-brown. - *Amanita vaginata*\* p.66
- 19 Cap reddish-brown to tan. - *Amanita fulva*
- 19 Cap bright red to reddish orange, covered with dull yellowish warts, gills pale yellow, stem pale yellow with a slight swelling at the base. - *Amanita parcivolvata*
- 20 Base of stem has a bulb that has a band of thin cottony tissue around the top. - *Amanita pantherina*
- 20 Base of stem has a bulb with a vertical split. Base bruises reddish-brown. - *Amanita brunnescens*
- 21 Grows on wood. - 22
- 21 Grows on the ground. - 26
- 21 Parasitic on other mushrooms. - 57
- 22 Mushroom fan-shaped, with stem off to the side. - 23
- 22 Mushroom with a roundish cap and a more or less central stem. - 25
- 23 Cap rarely over 1/2" across; whitish-tan, tough, slightly scaly. Grows in rows and clusters on deciduous stumps and logs. Glows in the dark. - *Panellus stypticus*\* p.199
- 23 Cap over 1/2" across. - 24
- 24 Cap white to grayish or brownish, up to 8" across. Grows on hardwood stumps and logs. Spore print often pale lavender. - *Pleurotus ostreatus*\* p.200
- 24 Cap white, not up to 8" across. Grows on conifer stumps and logs. Spore print white to creamy-yellowish. - *Pleurotus porrigens*
- 24 Cap white to light pinkish-gray or pale tan. Grows on quaking aspen. - *Pleurotus populinus*
- 24 Cap dull green or yellowish-green, often with brown, gray or purple tones. Sticky. Spore print light yellowish. Appears very late in the year. - *Panellus serotinus*\* p.198
- 25 Cap not over 1" across (average about 1/2" across). Yellow-rusty caps with a deep pit in the center. Gills run down the stem. Very skinny dark brown stem, fuzzy at the base. Grows densely on old conifer wood. - *Xerampalina campanella*\* p.202
- 25 Cap averages over 2" across. - 51
- 26 Underground base of stem surrounded by a delicate sheath. - 27
- 26 Base of stem not surrounded by a sheath. - 28
- 27 Cap reddish with tan, flaky warts. White gills with reddish stains. - *Amanita rubescens*\* p.64
- 27 Cap golden yellow to brownish-yellow with yellowish warts. - *Amanita flavorubescens*
- 28 Gills without a notch or depressed groove at the stem. - 29
- 28 Gills with a notch or depressed groove at the stem. - 44
- 4
- 29 Gills run down the stem. Cap typically over 2" across. - 34
- 29 Gills attached, but don't run down the stem. - 36
- 34 Cap brownish. White gills run down the stem deeply, giving the mushroom a vase shape. Stem grayish-brown, club-shaped. Grows under conifers. - *Clitocybe clavipes*\* p.70
- 34 Similar to *Clitocybe clavipes*, but cap is paler, and grows under hardwoods. - *Clitocybe subclavipes*

- 34 Cap finely velvety; orange, often browner at the center. Gills orange, repeatedly forked. - *Hygrophoropsis aurantiaca*\* p.73
- 34 Cap slimy, especially in wet weather. Gills feel waxy. - 35
- 35 Cap dark brownish-gray to black. White gills. - *Hygrophorus fuliginus*\* p.158
- 35 Cap olive-brown with paler margin. Pale yellow gills. - *Hygrophorus hypothejus*
- 35 Cap pale pink to rosy-red. Gills white, becoming reddish, and red-spotted from age or bruising. - *Hygrophorus russula*\* p.159
- 36 Cap typically over 2" across. - 37
- 36 Cap usually under 2" across. Narrow stem. - 53
- 37 Mushroom with a distinctive odor. - 39
- 37 Mushroom without a distinct odor. - 41
- 39 Flesh tough. Strong, fishy, unpleasant odor. Cap up to 7" across; white, becoming reddish-brown with age. White gills bruise rusty-brown. - *Russula compacta*\* p.93
- 39 Skunky odor. A Western mushroom that is very rare in the East. - *Clitocybe nebularis*
- 39 Fragile and brittle gills. - 40
- 40 Odor of almonds or maraschino cherries, yet unpleasant. Cap yellow to dull yellow-brown. - *Russula laurocerasi*\* p.95
- 40 Oily, rancid odor. Cap dull brownish-rusty to honey-coloured, - *Russula foetens*
- 40 Peculiar foul odor. Cap pale orangish-brown or pale yellowish-brown. - *Russula subfoetens*
- 40 Sickly sweet odor. Cap dull yellow to yellowish or brownish-yellow. - *Russula fragrantissima*
- 41 Fragile and brittle gills and stem. Cap with green tints.- 42
- 41 Mushroom not fragile and brittle. - 43
- 42 Surface of cap cracked into moldy green-looking patches. - *Russula virescens*\* p.97
- 42 Cap with moldy-looking green, yellow, and orange patches. - *Russula crustosa*\* p.94
- 42 Cap with mottled, but not moldy-looking, with dull tone of green, purple, pink, or yellow, or a mixture of these. - *Russula variata*\* p.96
- 43 Purple-brown cap. Widely spaced, distinctly purple gills. Grows mainly under oak trees, - *Laccaria ochropurpurea*\* p.76
- 43 Similar to *Laccaria ochropurpurea*, but grows in sandy dunes. - *Laccaria trullisata*
- 43 All violet mushroom with violet mycelial fuzz at the base of a swollen stem. Dull white or pinkish white spore print. - *Lepista nuda*\* p.195
- 43 Mushroom without purple tints. Cap smooth, buttery feeling; reddish-brown, fading to cinnamon color with age. Gills white, edges finely jagged. Grows under pines. - *Collybia butyracea*
- 44 Cap gray (Rarely with yellow shades); with dark radial, silky streaks. White stem and gills with yellowish tint. - *Tricholoma portentosum*\* p.167
- 44 Cap orange, scaly, and sticky. White gills. Stem orange, scaly with a white zone at the top. Mushroom has an unpleasant odor of rancid bread dough. - *Tricholoma aurantium*\* p.163
- 44 Cap with some shade of yellow. - 45
- 44 Cap dark grayish; not smooth. Grows under pines. - 46
- 44 Long skinny stem (2" to 8" long; 1/8" to 3/8" thick), with a long taproot-like extension underground. Brownish, slightly sticky cap. - 52

- 45 Cap bright yellow, darker near the center, but without dark scales; sticky in damp weather. Gills lemon-yellow. Stem yellowish-white. - *Tricholoma flavovirens*\* p.165
- 45 Yellowish cap with dark, scaly streaks at the center. Gills pale-yellowish. Stem white. Smells like bread dough. - *Tricholoma sejunctum*
- 45 With a disgusting petroleum odor of tar. Cap and gills sulphur-yellow. - *Tricholoma sulphureum*
- 45 Cap light yellow with darker yellowish scales. Gills white, without yellow tint. - *Tricholoma leucophyllum*
- 46 Cap over 2" and up to 6" across; covered with small, regularly scattered brown scales. Odor of bread dough. - *Tricholoma pardinum*
- 46 Cap rarely over 2" across; covered with fine, dark fur. - 47
- 47 Shows a slight cobwebby veil between the edge of the cap and stem when very young. - *Tricholoma myomyces*\* p.166
- 47 Without a cobwebby veil when young. - *Tricholoma terreum*
- 48 Flesh develops colored stain when bruised. - 49
- 48 Flesh does not stain color when bruised. - 50
- 49 Flesh stains reddish-orange when bruised, and becomes reddish with age. Cap white with reddish scales. - *Lepiota americana*\* p.83
- 49 Flesh stains saffron-yellow when bruised. Cap pinkish to brownish, covered with coarse, brown-tipped scales. - *Macrolepiota rachodes*
- 50 Cap smooth and white. - *Lepiota naucinoides*\* p.161
- 50 Cap white, with brown scales. Large, umbrella-shaped mushroom with a long, thin stem. - *Macrolepiota procera*\* p.85
- 51 Cap dull brown to cinnamon-brown with darker brown scales. Stem bases are narrowed. Grows in clusters at the base of trees in late summer and fall. - *Armillaria tabescens*\*
- 51 Big, bright orange caps. Grows in large, dense clusters on or at the base of hardwood trees and stumps. Gills glow in the dark. - *Omphalotus olearius*\* p.89
- 51 Velvety, brownish cap. Velvety, dark brown stem. Grows on conifer wood in small clusters. - *Paxillus atrotomentosus*\* p.92
- 51 Cap streaky grayish-brown, up to 5" across. Base of stem often with white cords. Gills white, very broad and very widely spaced. Often with anise odor. Grows on or around rotting wood. - *Megacollybia platyphylla*\* p.86
- 51 Small, slimy, orange cap. Stem smooth, pale yellow to orange-brown, developing a dark velvety surface with age. Grows in clusters, often from a single base, mainly on elm. Most common in colder months. - *Flammulina velutipes*\* p. 196
- 51 Small, drab gray to drab brown conical or bell-shaped cap. Thin, delicate stem. Grows in clusters on rotting wood. - 58
- 52 Stem smooth. - *Xerula radicata*\* p.90
- 52 Stem scaly. - *Xerula furfuracea*
- 52 Odor of carrots. - *Xerula megalospora*
- 52 Stem becomes rusty-tinted when bruised. - *Xerula rubrobrunescens*
- 53 Gills not yellow. Not particularly waxy-looking or waxy-feeling. - 54
- 53 Translucent, waxy-looking mushroom. Gills yellow to yellowish, with a waxy feel. - 55
- 54 Typically grows in carpets and clusters in wood chips. Yellow-brown cap. White, crowded gills. - *Collybia dryophila*\* p.35

54 Typically grows in arcs and circles in lawns and grassy places. Cap whitish-tan, with a knob in the center. White, widely spaced gills. Stem thin, firm, and very tough when mature. Pleasant spicy odor. - *Marasmius oreades*\* p.37

54 Grows in grass, sometimes in arcs. Cap whitish-tan, without a central knob. Gills crowded. Odor not spicy, but somewhat like bread dough. - *Clitocybe dealbata*.

54 Typically grows singly or scattered under trees, but usually not in lawns and wood chips. Cap pale red to pale pinkish-red when moist; pale rusty to tan when dry. Pale pinkish-tan gills. - *Laccaria laccata*\* p.74

54 Similar to *Laccaria laccata*, but entirely purple.- *Laccaria amethystina*

55 Moist, bright yellow-orange to orange cap. Gills bright yellow (sometimes bright orange). - *Hygrophorus marginatus*\* p.71

55 Scarlet to reddish-orange cap that fades to orangish-yellow with age. - *Hygrophorus miniatus*

55 Slimy, bright yellow to orangish-yellow cap. Dry, yellow stem. - *Hygrophorus flavescens*

55 Cap and stem slimy. Deep lemon-yellow to orange-yellow cap. - *Hygrophorus chlorophanus*

56 Parasitic on various *Lactarius* and *Russula* species. Gills not distorted. Roundish, potato-like tuber at base of stem. - *Collybia tuberosa*

56 Parasitic on blacking *Russula* species. Gills distorted. - 57

57 Cap white, up to 3/4" across; covered with white spores. - *Asterophora lycoperdoides*\* p.69

57 Similar to *Asterophora lycoperdoides*, but cap not covered with white spores. - *Asterophora parasitica*

58 Cap with lines that duplicate the gill pattern beneath. White gills that become pinkish, without pink spots, with age; and with prominent cross-veins. Stem whitish; gray at the bottom.- *Mycena galericulata*\* p.87

58 Similar to *Mycena galericulata*, but develops pink spots on the gills. - *Mycena maculata*.

58 Similar to *Mycena galericulata*, but smells alkaline. - *Mycena alkalina*

58 Similar to *Mycena galericulata*, but has a white speckled stem that is rusty-brown at the bottom. - *Mycena inclinata*

### **F: Gilled mushrooms with a green spore print**

Cap up to 10" across; covered with brownish scales. Gills unattached to stem, becoming greenish. Stem with a swollen base, and a white ring that is greenish to brownish on the underside edge. Grows in lawns and meadows. - *Chlorophyllum molybdites*

### **G: MUSHROOMS WITHOUT GILLS**

1 Mushrooms with pores on the underside. - 2

1 Mushroom without pores. - 20

2 Soft, fleshy mushroom with a somewhat circular cap and a central stem. - 3

2 Large, soft and fleshy, wood-growing mushroom; several wavy caps growing in overlapping, shelf-like or rosette form. Bright orange topside. Tough when older, - 15

2 Gray to brown, coral-like, branching clumps of flat, fan-shaped caps, growing from a single, branched stem. White, porous underside. Grows at the base of hardwood trees and stumps, mainly oak. - 16

2 Tough, firm mushroom that grows in a fan or shelf shape from stumps and logs. - 17

- 3** Has at least 3 of the following (a to e) features: - **4**
- a: Grows under conifers.
  - b: Sticky cap in damp weather.
  - c: Large pores, stretched outward from stem.
  - d: Stem with shallow dark dots.
  - e: Veil covers young pores; leaves a ring on the stem, and/or tissue on cap edge.
- 3** Pores not pink. Ring-free stem covered with raised, dark dots. - **10**
- 3** Mature pores pink. No ring on the stem. Taste strongly bitter. - **11**
- 3** Coarse, shaggy, gray and black, scaly cap. Pores gray, bruising red, then black. Stem dark gray, and shaggy or woolly, with a vague ring. Mushroom's exposed interior flesh becomes red, then slowly blackish. - **12**
- 3** Stem long, shaggy, with a coarsely netted pattern. Pores yellow. Stem ring-free. - **13**
- 3** Reddish-brown cap. Whitish pores that become rusty-yellow when bruised. Smooth, ring-free stem, colored like the cap. - **14**
- 4** Grows under tamarack or larch. - **5**
- 4** Grows under white pine. - **6**
- 5** Hollow stem. Hairy brown, dry cap. Large, outward stretched yellow to greenish-yellow pores.- *Suillus cavipes*
- 5** Bright yellow to orange-yellow, sticky cap. Small, bright yellow pores when young, bruising brownish. Yellowish stem with a cottony ring. - *Suillus grevilii*\* p.173
- 6** Dry cap and stem; both covered with red, felt-like scales. Exposed yellow flesh becomes pinkish or brownish. Stem with a grayish ring. - *Suillus pictus*\* p.122
- 6** Sticky cap and stem with pale reddish, streaky patches. Pores yellow; bruise reddish-brown. Stem thin, with a ring, and covered with shallow, darker dots. Exposed yellow flesh becomes purplish-brown. - *Suillus americanus*\* p.172
- 6** Cap smooth and sticky; without reddish scales or patches. - **7**
- 7** Cap dark brown. Whitish stem with shallow dots above a white ring that is dark purplish on the underside. - *Suillus luteus*\* p.174
- 7** White, ring-free stem. Small, white to yellowish pores. Mushroom does not change color when bruised. - **8**
- 8** Stem covered with little, pinkish to pale brownish, shallow dots. - **9**
- 8** Stem without dots. - *Suillus brevipes*
- 9** Cap light brown to cinnamon colored. - *Suillus granulatus*\* p.121
- 9** Cap white. - *Suillus placidus*
- 10** Cap brick-orange colored, slightly sticky; exposed flesh becomes wine-red, then grayish, finally black. Pores tiny, whitish, bruising olive. Stem whitish, with blackish, raised dots. Grows under aspen and pine. - *Leccinum auranticaum*\* p.118
- 10** Similar to *Leccinum auranticaum*, but white pores bruise pinkish-brown. Exposed flesh becomes violet-gray to dirty brown. Grows under aspen and birch, not pine. - *Leccinum insignae*
- 11** Cap and stem purplish. Pores do not change color when bruised. Stem not swollen at base. - *Tylopilus plumbeoviolaceus*\* p.124
- 11** Cap purplish. Stem not purplish; becoming olive-tinted. Pores bruise brownish. - *Tylopilus rubrobrunnescens*
- 11** Cap brown to tan. Pores sometimes bruise brownish. Stem with net- like surface pattern; swollen at the base. - *Tylopilus felleus*
- 12** Cap scales soft, large, and broad. - *Strobilymyces floccopus*\* p.109

12 Cap scales hard, small, and pointed. - *Strobilomyces confusus*

13 Sticky, yellow-orange cap. - *Austroboletus betula*\* p.116

13 Dry, wooly, yellow-brown cap. - *Boletellus russellii*

14 Cap with pale yellow dots. - *Boletus affinis* var. *Maculosus*\* p.117

14 Cap without yellow dots. - *Boletus affinis* var. *affinis*

15 Cap bright orange. Underside bright sulphur-yellow. - *Laetiporus sulphureus*\* p.177

15 Similar to *Laetiporus sulphureus*, but cap sometimes more orangish-pink. Underside white. - *Laetiporus persicinus*\* p.42

16 Does not change color when bruised. - *Grifola frondosa*\* p.176

16 Similar to *Grifola frondosa*, but can grow in bigger clumps. Becomes black when bruised. - *Meripilus sumstinei*\* p.127

16 Forms clumps of branches with somewhat circular cap, and more or less central stems. - *Grifola umbellata*

17 Grows in large, typically overlapping clusters; thick, pale yellowish caps, covered with brown scales. Large whitish pores Stem black near the base. Prefers to grow on elm, mainly during morel season in the spring. Fleshy when young; tough when old. - *Polyporus squamosus*\* p.44

17 Big, thick, smooth, and shiny red-varnished, corky, fan-shaped cap. Whitish underside. Grows on hemlock. - *Ganoderma tsugae*.\* P.125

17 Very similar to *Ganoderma tsugae*, but grows on hardwoods. - *Ganoderma lucidum*

17 Small, thin, leathery, stemless, shelf-like fans. Grows in overlapping tiers. - 18

18 Grows on hardwoods. - 19

18 Grows on conifer wood. Cap with pale, drab color bands. Violet-colored pores. - *Hirschioporus pergamenus*

19 Displays rainbow-colored bands on the smooth top. White pores. - *Trametes versicolor*\* p.205

19 Top hairy, with only grayish and yellowish to brownish color bands. White pores. - *Coriolus hirsutis*

20 Grows only on *Collybia dryophila* as a pale yellow or cream-colored jelly-like glob. - *Syzygospora mycetophila*\* p.38

20 Grows on the ground. - 21

20 On wood. - 37

21 Has a somewhat circular cap and central stem. - 22

21 Without a somewhat circular cap. - 27

22 Feels and looks like jelly. Very slippery. Cap not over 3/4" across, and shaped like a wad of chewing gum. Grows in groups and clusters. - 23

22 Wrinkled, branching lines running under the cap. - 24

22 Underside barely wrinkled. All yellow mushroom. - *Cantharellus lateritius* = *Craterellus cantherellus*

23 All yellow. - *Leotia lubrica*\* p.110

23 Green cap. Stem whitish to yellowish to orange. - *Leotia viscosa*\* p.111

24 Entirely bright pinkish-red. - *Cantharellus cinnabarinus*\* p.102

24 Entirely bright yellow - 25

24 cap brown. - 26

25 Cap up to 3" across. Fruity odor. - *Cantharellus cibarius*\* p.100

- 25 Cap up to 2" across. - *Catharellus ignicolor*\*
- 25 Cap under 1 1/2" across. - *Cantharellus minor*\* p.103
- 26 Blackish-brown, smooth cap. Lemon-yellow, hollow stem. Pale yellow-brown spore print. - *Cantharellus infundibuliformis*\* p.204
- 26 Yellow-brown to dark brown cap. Orange to orangish-yellow stem. White spore print. - *Cantharellus tubaeformis*\*
- 27 Deep funnel-shape; thick and fleshy. - 28
- 27 Trumpet-shaped, without a cap and stem. Flesh thin, flexible. Entirely black, dark gray, to dark brown. - 29
- 27 Ball-shape form, no stem. - 31
- 27 Hollow cap like an upside-down ice cream cone, coarsely netted with pits; inter grown with a hollow white or yellowish wrinkled stem. - 34
- 27 Small, bright yellow, dense clusters of fleshy, thin fingers, often growing from one base. - 36
- 27 Roundish clump of pale, flat, thin, wavy ribbons. Rooted with a thin cord. *Sparassis crispa*\* p.115
- 28 orange, and coarsely scaly inside the funnel. Outside surface pale rusty-yellow. - *Gomphus floccosus*\*
- 28 Inside brown to dark violet. Outside, some shade of violet. - *Gomphus clavatus*
- 29 Unpleasant taste. White spore print. - *Craterellus cinereus*
- 29 Fruity odor. Pleasant taste. - 30
- 30 Spore print rusty-colored. - *Craterellus fallax*\* p.105
- 30 Spore print white. - *Craterellus cornucopiodes*
- 31 Smooth, thin, soft surface. Soft interior. - 32
- 31 Thick and tough skin. Hard interior. Blackish spores. - 33
- 32 Huge (from about 8" to possibly 30" across). Snow white when young and fresh, becoming yellowish with age. Develops light to dark brown spores when mature. - *Langermania gigantea*\* p.169
- 32 Up to 8" across. White to light brown surface. Somewhat upside-down pear-shaped. Makes dark purple spores when mature, and leaves a purple vase-shaped form that overwinters. - *Calvatia cyathiformis*\* p.99
- 33 Yellow, rough, warty hide. - *Scleroderma citrinum*\* p.113
- 33 Southern species, grows in sand dunes. Surface yellowish, with small scales. - *Scleroderma meridionale*
- 33 Skin thin when mature; yellowish, covered with brownish scales. - *Scleroderma areolatum*
- 33 Smooth-skinned when young. Yellowish. - *Scleroderma flavidum*
- 34 Brownish-yellow cap attached to the stem midway up the cap interior. - *Morchella semilibera*
- 34 Base of cap attached to the stem. - 35
- 35 Cap yellow-brown to tan. - *Morchella esculenta*\* p.41
- 35 Similar to *Morchella esculenta*, but with a very wide stem, often wide as cap. - *Morchella crassipes*\* p.41
- 35 Tan cap with bright white pit ridge edges when young. - *Morchella deliciosa*\* p.41
- 35 Tan cap with black pit ridges. - *Morchella elata*\* p.41
- 36 Bright yellow to orange-yellow fingers from 1/8" to 1/2" thick. - *Clavinulopsis fusiformis*\* p.104
- 36 White, cream, to faintly yellow delicate fingers, up to 1/8" thick. - *Clavinulopsis helvola*
- 37 Brown, upside down pear -shaped form up to 2" across, no stem. Grows on dead stumps, logs and woodchips. White fibers at the base. - *Lycoperdon pyriforme*\* p.112
- 37 Resembles a tiny bird's nest, with little egg-forms inside. Grows in dense groups on woodchips. - 38

**37** White, coral-like form, with many drooping teeth. - [39](#)

**37** Resembles a small wad of chewing gum with a jelly-like appearance and feel. - [40](#)

**38** Cups up to 3/8" across. White interior; brownish, shaggy outside. Contains several small, flattened "eggs" with attached stick white cords. - *Crucibulum laeve*\* p.106

**38** Similar to *Crucibulum laeve*, but cups less than 3/8" across, and the outside paler. - *Crucibulum parvulum*

**38** Vertical lines inside the cup, and "eggs" are dark-colored. - *Crucibulum striatus*

**39** Clump-like form, with long, downward-pointing, tooth-like spines. - *Hericium erinaceus*

**39** Delicately branching form with 3/8" or shorter teeth. - *Hericium coralloides*\* p.170

**40** Orange. Grows on dead conifer wood. - *Dacrymyces palmatus*\* p.108

**40** Yellow, Grows on dead hardwood. - *Tremella mesenterica*