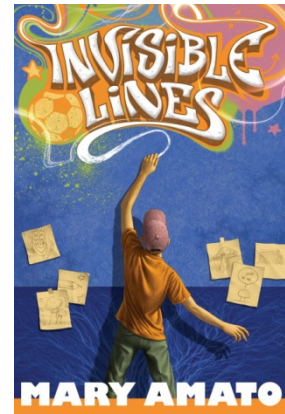


Invisible Lines by Mary Amato

Interdisciplinary Exploration Unit



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Seeing Opportunities Instead of Dreading Revision

Writers have to have a good attitude about revision. Read and discuss what Mary Amato has to say about this:

On the final edit of a manuscript, my editor writes questions or requests for changes on a post-it note and folds it over the page. Let's just say there's a post-it note on almost every page. This photo shows the final edit of *Invisible Lines*, a book I spent six years writing and rewriting.



After having wrestled with this manuscript so much on my own, I could be overwhelmed to see so many comments at this last stage. Instead of getting depressed or defensive, I try to look at each suggestion as an opportunity to make the book better.

Example of Revision

All writers have to revise their work. See Mary Amato's actual example of a revised scene from the book.

In one scene, Trevor's science teacher has taken his class outside for a lesson. Trevor is lying in the grass, looking up at the sky. Here is a short paragraph from my first draft:

The sky is blue and cloudless. I feel like I'm not in school or maybe like I'm back in Headstart when we got to go outside and play in the field.

I wasn't happy with it because it doesn't give the reader much of a feel for Trevor's character, but I couldn't think of how to revise it. So, I went outside and I pretended to be Trevor and stretched out on the grass. He loves to do graffiti, so when I was lying there, I immediately imagined wanting to write my name in the sky. This gave me a chill because the writing of names is a recurring theme in the book.

As soon as I thought of that, I started making other important connections and ended up rewriting and expanding the entire scene. Here's the revision of the sentences from the first draft.

...Above me the sky is like a canvas that has been painted the most perfect shade of blue, and I want to reach up and write my name in the sky. Trevor Musgrove. I'd like to have a skywriting business and write people's names in the sky. When the wind blows, each letter will billow and stretch, like the name is alive. --From page 79 (hardcover edition)

Putting yourself in your character's shoes and actually pretending to be your character is a great way to get insight into how your character thinks, which will give your writing more power.

Writing Invisible Lines Video

Watch and discuss the video about the writing process for Invisible Lines.

<http://www.maryamato.com/new-3-minute-video-on-the-writing-process>

Science

Science Project Ideas

- Research and choose two mushrooms that are not mentioned in the book and create your own Kingdom of Fungi Identification Notebook entries for them.
- Examine a mushroom using appropriate safety precautions; draw and label the parts.
- Create a microscope slide of spores and describe/draw what you see.
- Design your own mycology experiment.

Guide to Making Spore Prints

In *Invisible Lines*, Trevor Musgrove makes a spore print. If you'd like to try it, read on.

Mushrooms release spores, which are tiny, round, reproductive bodies, which you can literally “capture” in a print. Take a mushroom and gently remove the stem—you don't want to damage the mushroom, but you do want to make sure the thin veil of flesh covering the gills is open so that the gills are exposed. Put the mushroom gill-side down on a piece of paper and cover with a glass. Wait 24 hours, lift off the glass, and carefully pick up the mushroom. You should see the spores released in a pattern.

If the spores are white, you won't see them on white paper and should try placing a new mushroom on a piece of black paper. Some people make spore prints on half black/half white paper to cover either possibility.

Grocery store mushrooms do not work well because they aren't fresh. Your best bet is to pick a mushroom in the wild, one in which the veil has already begun to open or has opened. You should wash your hands after handling the mushroom, but don't worry about toxicity exposure...mushrooms that are poisonous to eat are okay to handle with appropriate caution.



If you want to keep your print, make sure to spray it with fixative.

Some people are allergic to mushroom spores, so be appropriately cautious and don't sniff the spores.

Going on a Foray

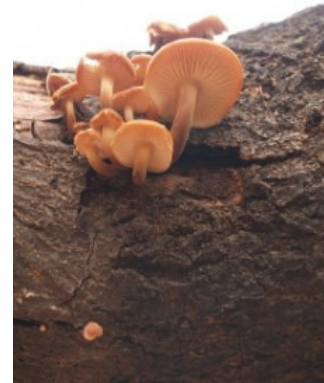
Once you start looking for mushrooms, you will start to see them growing on trees, near trees, under leaves, near creeks, in median strips, on your front lawn, and even in the big city.

Simply keeping your eyes open is the best way to get started. Great places to look are rotting trees, stumps, piles of leaves, and thatched areas of meadows, according to Britt A. Bunyard, mycologist and publisher of *Fungi*, a magazine for professional and amateur mycologists. "Remember that fungi, unlike plants, can't capture their energy directly from the sun; they get it by rotting things that were once alive," he says.

When you see a shroom, stop, and really examine it. What does the cap and stalk look like? What color are they? What texture? Does it have an odor? What does it feel like? "Use all the senses when you observe," advises Sandy Sheine, Education Chair of the North American Mycological Association.

Although some mushrooms are poisonous—and you should never eat or taste anything you pick in the wild unless you are with an actual mycologist—it is okay to touch wild mushrooms, according to Sheine. But remember: You should always wash your hands after touching anything in the wild.

If the mushroom has a cap, make sure to look underneath it to see if the mushroom has gills or pores, Sheine suggests. A fun way to do this is to use a small dental mirror, which you can buy for just a few dollars. This allows you to leave the mushroom undamaged in the natural habitat.



After you've examined the mushroom, it's time to record it in your notebook. Draw a sketch or take a photograph from several angles. Also make a written entry in the notebook, jotting down observations that might be forgotten later, such as the size or location. Is it in a meadow? On a tree? What kind of tree?

Bring a field guide (see box) for your region and try to identify the mushroom on the spot using all the clues you've collected. Remember that different mushrooms appear at different times of the year. Especially after a good soak. "Fall is the best season east of the Rockies; late summer is the best for the Rocky Mountain areas; and winter is THE season for the west coast," advises Bunyard.

Wherever you live, keep your eyes open all year round. You never know what you'll find.

Geography and History

- Choose one type of mushroom. Research where that mushroom grows.
- Research how different cultures use or have used mushrooms.
- Find out what mushrooms are local to your geographic area. Read and discuss these fascinating articles. One is about the effect of lightning on mushroom growth and another is about growing mushrooms in abandoned tunnels

<http://www.geog.ucsb.edu/events/department-news/694/mushroom-cultivation-gets-a-jolt/>

<http://www.ediblegeography.com/day-out-the-mushroom-tunnel/>

Art

Art Project Ideas

- Create your own mushroom stamp using appropriate safety precautions.
- Make clay mushrooms out of bake-able clay. Turn one into an ornament by inserting a loop of string or wire; turn another into a mushroom card holder by cutting a slot in the dome. In the book, Trevor often recalls the wise sayings of his mom. Write each saying on a separate card and place these in your mushroom card holder.
- Study the mushroom-related artwork of Emile Boudier and Ernst Haeckel.

Mushroom Sculpture



Here's a mushroom craft idea. Software developer and game designer Zach Barth, in Bellevue, WA, realized that screws resemble mushrooms and created this whimsical sculpture.

First find some large screws and paint them however you like. Although it may scratch off, Barth suggests using standard, hobby-grade acrylic paint. Next, find a fallen tree branch, thick enough to hold the "mushrooms" you've made. Using appropriate safety precautions and adult supervision, drill a hole for each "mushroom." Hand-held manual drills are great for projects like this.

Video Projects

- Create a music video relating to ideas in *Invisible Lines* with a group. Get creative with song choice, camera angles, and costumes.
- Imagine that *Invisible Lines* is being turned into a movie and make a trailer for it. Try to summarize the storyline in a way that would be interesting to audiences.

Cooking

Buy some mushrooms at your favorite grocery store and try a recipe below using appropriate safety precautions and adult supervision. Don't forget to cook your mushrooms thoroughly. When you're trying a new food, it's best to test for allergies by just having a small taste the first time.

Recipes

Mushroom Burgers for One

- Preheat a toaster oven to 400° F.
- Chop and sauté mushrooms (one large portabella or a half-dozen small button mushrooms) in olive oil. Let them cool slightly.
- Meanwhile in a bowl, beat an egg and add ¼ cup of breadcrumbs and any seasonings you like. Add the mushrooms to the egg mixture, add 2 oz of crumbled feta cheese and mix. Form this mix into two patties.
- Place the patties on a well-oiled baking pan. Bake them in the toaster oven for 10 minutes and then flip and bake for 7 more minutes or until golden brown.
- Serve with a dollop of plain Greek yogurt and a splash of hot sauce!

Stuffed Caps

- Coat mushroom caps (you can use any type of edible mushroom. I prefer baby bellas) with olive oil & stuff with goat cheese.
- Season w/sea salt & your favorite herb.
- Bake on well greased (use olive oil) baking pan at 375 for fifteen minutes or until tender.

Mushroom and Pumpkin Soup

- Saute your favorite type of edible mushroom and onions in olive oil.
- Add 1 t. curry powder and 1 T flour (or potato starch)
- Stir in 2/3 can of pumpkin, add 28 ounces of any type broth.
- Cook for 30 minutes.
- Add 1 cup of milk (do not boil).
- At the very end, you can also add the following optional garnishes: chopped cilantro, chopped spinach, croutons. Delicious!

Shiitake Pasta

- While you're boiling up your favorite noodles, sauté some shiitake mushrooms in olive oil until they are thoroughly cooked. Add other veggies if you want.
- When the noodles are done, toss the shrooms with the pasta and add goat cheese. Stir until the cheese melts into a creamy sauce. Easy and yummy.