Birth of the Incense Stick

It has been pointed out since the old days that the essence of incense stick making lies in the fine selection and delicate mixing of raw materials and skill of artisans.

Baieido, with its long tradition of incense stick making and the recent technology, makes every incense stick carefully. We value traditional hand-making, using natural materials and the unique mixing method.

1. Laboratory
The laboratory inspects the quality of the natural perfume that is the main ingredient of incense sticks, makes research and development of new products, and carries out stringent control of the product smell.

2. Milling
Aloes and sandalwoods are crushed into powder.

3. Blending
About 10 different kinds of incense and dyes are blended with the original proportions.

4. Sieving
Mixed materials are made uniform in a mixer and put through a sieve to remove impurities.

5. Kneading
The materials are kneaded into clay-form materials. A single mass of the clay-form material is called "tama".

6. Extruding
"Tama" is pressed through a hydraulic extruder to shape sticks. They are extruded on a tray and cut into a fixed length.

7. Straightening
The sticks of incense are put on the board to be dried. In this process, the sticks that are not straight are removed while the rest of them are placed neatly.

8. Cutting
The sticks of incense are cut in various lengths according to the uses.

9. Drying
Natural drying is the most appropriate. It requires several days during summer and more than 10 days during winter.
10. Adjusting with a board
   This process eliminates the space between the half-dry incense sticks and prevents incense sticks from being crooked or bent. Hand-making enables to check even the slightest bend.

11. Binding
   Each stick is inspected carefully. They are bound together by a fixed weight to prevent any bend.

12. Packing
   Packing is done while inspecting each product.

The Journey of Japanese Incense

It begins under the flower of peace, before the fall of the plum blossoms, before monks burning incense in Japanese temples, before the rising scents from scented kimono sleeves mixed with the fragrant incense of natural pine, cedar, lavender, and the flowers of the sun.

The art of Japanese incense making has long been a tribute to nature itself. One of the great Awaseko of early Japan was called "Baika" which is Japanese for plum.
Perhaps one way to look at the connection formed between nature, incense, and humanity is through poetry. . .

I breathe in the cool incense smoke from the metal brazier,
While thinking about a poem for my dear friend Lu Wa.
My sandalwood-hearted companion spits out plum blossoms of smoke,
Looking like the cloudy fog of the other world.
Perhaps it's the soul of my friend the old mountain man
In the smoke's dense patterns?

- Kan Po, in memoriam (undated)

Surely the connection between poetry and incense comes from the connection of poetry and nature . . .

If the maple leaves
On Ogura mountain
Could only have hearts,
They would longingly await
The emperor's pilgrimage.

- Ogura Hyakunin Isshu

Does the sense of smell effect our emotions more than our other senses? Maybe Lafcadio Hearn gave us an answer over one-hundred years ago. . .

"I see rising out of darkness, a lotus in a vase. Most of the vase is invisible; but I know that it is bronze, and that its glimpsing handles are bodies of dragons. Only the lotus is fully illuminated: three pure white flowers, and five great leaves of gold and green,-- gold above, green on the up curling under-surface, an artificial lotus. It is bathed by a slanting stream of sunshine; -- the darkness beneath and beyond is the dusk of a temple-chamber. I do not see the opening through which the radiance pours; but I am aware that it is a small window shaped in the outline-form of a temple bell. The reason that I see the lotus -- one memory of my first visit to a Buddhist sanctuary—is that there has come to me an odor of incense. Often when I smell incense, this vision defines; and usually thereafter other sensations of my first day in Japan revive in swift succession with almost pain acuteness."

Even today, in Japan, there is a strong relationship between nature, incense, poetry, and the human spirit.
Recipes: Healing

Use the Healing incense recipes and ingredients list to begin creating your own Healing incense recipes.

You can either build your own recipes by choosing two or more aromatics from the Healing Ingredients list, or you can start with one of the Healing incense recipes provided below and make changes according to your tastes.

### Healing Incense Ingredients

<table>
<thead>
<tr>
<th>Base Notes</th>
<th>Middle Notes</th>
<th>Top Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aloeswood</td>
<td>Calamus</td>
<td>Allspice</td>
</tr>
<tr>
<td>Amber</td>
<td>Carnation</td>
<td>Bay Laurel</td>
</tr>
<tr>
<td>Angelica</td>
<td>Cinnamon</td>
<td>Coriander</td>
</tr>
<tr>
<td>Burgundy Pitch</td>
<td>Colophony Pine</td>
<td>Eucalyptus</td>
</tr>
<tr>
<td>Cassia</td>
<td>Gardenia</td>
<td>Fennel</td>
</tr>
<tr>
<td>Cedarwood</td>
<td>Heliotrope</td>
<td>Lime Peel</td>
</tr>
<tr>
<td>Dammar</td>
<td>Honeysuckle</td>
<td>Pepper, Cayenne</td>
</tr>
<tr>
<td>Galbanum</td>
<td>Juniper Berries</td>
<td>Peppermint</td>
</tr>
<tr>
<td>Guggul</td>
<td>Juniper Tips</td>
<td>Pine Needles</td>
</tr>
<tr>
<td>Juniper Wood</td>
<td>Lavender</td>
<td>Rosemary</td>
</tr>
<tr>
<td>Myrrh</td>
<td>Lemon Balm</td>
<td>Spearmint</td>
</tr>
<tr>
<td>Sandalwood</td>
<td>Melissa</td>
<td>Thyme</td>
</tr>
<tr>
<td>Spikenard</td>
<td>Mugwort</td>
<td>Wintergreen</td>
</tr>
<tr>
<td>Spruce</td>
<td>Pine Resin</td>
<td></td>
</tr>
<tr>
<td>Storax</td>
<td>Rose</td>
<td></td>
</tr>
<tr>
<td>Violet</td>
<td>Saffron</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sandarac</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sweetgrass</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Turmeric</td>
<td></td>
</tr>
</tbody>
</table>

*Top notes* are the first aromas we smell. They're often lighter, sweeter and spicier and diffuse into the air very quickly. *Middle notes* (heart notes) diffuse into the air more slowly. They give body and fullness to a recipe. *Base notes* are the longest lasting scents and most “fixed” of all. Most Base note ingredients are also “fixatives” meaning they combine or “fixate” all the ingredients together as one.

In most cases, at least one base note ingredient is recommended in a recipe. Combining multiple top, middle and base notes will create an aroma with much more depth and body.
There are no hard and fast rules though so have fun experimenting with each group to see what suits you.

You can also blend Healing ingredients with ingredients of other properties, such as those that are Cleansing or Strengthening, or perhaps with a few that are Relaxing, etc. The possibilities are endless and filled with fun... enjoy!

**Healing Incense Recipes**

<table>
<thead>
<tr>
<th>Mental Clarity</th>
<th>Purify &amp; Strengthen</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 parts Aloeswood</td>
<td>2 parts Juniper Wood</td>
</tr>
<tr>
<td>2 parts Sandalwood</td>
<td>2 parts Atlas or Lebanon Cedar</td>
</tr>
<tr>
<td>2 parts Rose Petals</td>
<td>1 part Colophony Pine</td>
</tr>
<tr>
<td>1 part Calamus</td>
<td>1 part Juniper Berries</td>
</tr>
<tr>
<td>1 part Spikenard</td>
<td>1 part Juniper Tips</td>
</tr>
</tbody>
</table>

**Cooling**

| 3 parts Dammar | 1 part Eucalyptus |
| 1 part Sweetgrass | |
| 1/2 part Calamus | |
| 1/2 part Lavender | |

A "part" is any unit of measurement you wish to use, provided it's consistent throughout the entire recipe. We often use the conversion of 1 part = 1, 2, or 3 grams for small batches, and maybe 1 part = 5 to 10 grams for larger batches, etc. If you prefer, you can use powdered volume measurements with teaspoons, tablespoons and/or cups.

Once you've selected the recipe or ingredients you wish to use, you're ready to begin making your own Healing incense. First gather the ingredients you'll be using then click begin to get started using our step by step guides.

**Recipes: Prayer**

This section is devoted to creating incense recipes for use during Prayer, specifically for those who wish to pray for the assistance of others. The energy of prayer incense is conducive to reaching out and sharing love, compassion, healing, and encouragement.

If you're seeking contemplative prayer incense mixtures, please see our meditation recipes section.

You can either build your own recipes by choosing two or more aromatics from the Prayer Incense Ingredients list, or you can start with one of the Prayer incense recipes provided below and make changes according to your tastes.

**Prayer Incense Ingredients**

<table>
<thead>
<tr>
<th>Base Notes</th>
<th>Middle Notes</th>
<th>Top Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Aloeswood
Copal–White
Dammar
Elemi
Frankincense
Galbanum
Mastic
Myrrh
Sandarac
Spikenard
Stacte
Storax

Borneol Camphor
Iris root
Rose

Anise
Bay Laurel
Hibiscus
Orange Peel

Top notes are the first aromas we smell. They're often lighter, sweeter and spicier and diffuse into the air very quickly. Middle notes (heart notes) diffuse into the air more slowly. They give body and fullness to a recipe. Base notes are the longest lasting scents and most "fixed" of all. Most Base note ingredients are also "fixatives" meaning they combine or "fixate" all the ingredients together as one.

In most cases, at least one base note ingredient is recommended in a recipe. Combining multiple top, middle and base notes will create an aroma with much more depth and body. There are no hard and fast rules though so have fun experimenting with each group to see what suits you.

You can also blend ingredients conducive to Prayer with ingredients of other properties, such as those that encourage Love or Healing, or perhaps with a few that help promote Peace, etc. The possibilities are endless and filled with fun... enjoy!

### Prayer Incense Recipes

<table>
<thead>
<tr>
<th>Songs in Heaven</th>
<th>Healing Hands</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 parts Frankincense</td>
<td>1 part Frankincense</td>
</tr>
<tr>
<td>1 part Dammar, light</td>
<td>1 part Myrrh</td>
</tr>
<tr>
<td>1 part Elemi</td>
<td>1 part Sandarac</td>
</tr>
<tr>
<td>1 part Lavender</td>
<td>1/2 part Galbanum</td>
</tr>
</tbody>
</table>

**New Beginnings**

2 parts Mastic
1 part Copal, black
1 part Myrrh
1/2 part Spikenard

A “part” is any unit of measurement you wish to use, provided it's consistent throughout the entire recipe. We often use the conversion of 1 part = 1, 2, or 3 grams for small batches, and maybe 1 part = 5 to 10 grams for larger batches, etc. If you prefer, you can use powdered volume measurements with teaspoons, tablespoons and/or cups.

Once you've selected the recipe or ingredients you wish to use, you're ready to begin making your own incense for Prayer. First gather the ingredients you'll be using then click **begin** to get started using our step by step guides.

**Recipes: Meditation**
Meditation Incense Ingredients are traditionally used to support or enhance times of meditation, concentration, and contemplation. As they're associated with mysticism, you may find yourself more aware of free-flowing interconnectedness.

These select ingredients also assist in the cultivation of deeper awareness through supporting physical energy, illumination, and health. They're also associated with success. Meditation incense ingredients help empower and add a mystical element to any incense recipe.

If you're seeking incense to use during prayer, specifically prayer for the assistance of others, please see our [Prayer Recipes](#) section.

You can either build your own recipes by choosing two or more aromatics from the Meditation Ingredients list, or you can start with one of the Meditation incense recipes provided below and make changes according to your tastes.

### Meditation Incense Ingredients

<table>
<thead>
<tr>
<th>Base Notes</th>
<th>Middle Notes</th>
<th>Top Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aloeswood</td>
<td>Cinnamon</td>
<td>Pine Needles</td>
</tr>
<tr>
<td>Benzoin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cassia</td>
<td>Gardenia</td>
<td></td>
</tr>
<tr>
<td>Copal-Black</td>
<td>Jasmine</td>
<td></td>
</tr>
<tr>
<td>Copal-Gold</td>
<td>Pine Resin</td>
<td></td>
</tr>
<tr>
<td>Dragon's Blood</td>
<td>Rose</td>
<td></td>
</tr>
<tr>
<td>Elemi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frankincense</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Galbanum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guggul</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labdanum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mastic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Myrrh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sage-White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sandalwood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tolu Balsam</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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In most cases, at least one base note ingredient is recommended in a recipe. Combining multiple top, middle and base notes will create an aroma with much more depth and body. There are no hard and fast rules though so have fun experimenting with each group to see what suits you.
You can also blend Meditation ingredients with ingredients of other properties, such as those that are Relaxing or Healing, or perhaps with a few that are believed to promote Peace, etc. The possibilities are endless and filled with fun... enjoy!

<table>
<thead>
<tr>
<th>Meditation Incense Recipes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breath</strong></td>
</tr>
<tr>
<td>2 parts Elemi</td>
</tr>
<tr>
<td>1 part White Sage</td>
</tr>
<tr>
<td>1 part Pine Needles</td>
</tr>
<tr>
<td>(make pellets)</td>
</tr>
<tr>
<td><strong>Awareness</strong></td>
</tr>
<tr>
<td>4 parts Sandalwood</td>
</tr>
<tr>
<td>2 parts Aloeswood</td>
</tr>
<tr>
<td>1 part Cassia</td>
</tr>
<tr>
<td>1 part Clove</td>
</tr>
<tr>
<td>pinch of Borneol Camphor</td>
</tr>
<tr>
<td><strong>Eternal</strong></td>
</tr>
<tr>
<td>3 parts Mastic</td>
</tr>
<tr>
<td>1 part Black Copal</td>
</tr>
<tr>
<td>1 drop Jasmine Essential Oil</td>
</tr>
</tbody>
</table>

A "part" is any unit of measurement you wish to use, provided it's consistent throughout the entire recipe. We often use the conversion of 1 part = 1, 2, or 3 grams for small batches, and maybe 1 part = 5 to 10 grams for larger batches, etc. If you prefer, you can use powdered volume measurements with teaspoons, tablespoons and/or cups.

Once you've selected the recipe or ingredients you wish to use, you're ready to begin making your own Meditation incense. First gather the ingredients you'll be using then click begin to get started using our step by step guides.

**Recipes: Favorites**

In trying to create an incense recipe it's easy to become overwhelmed by the sheer number of aromatic ingredients there are to choose from. It can cause a sort of "writer's block" when trying to create new recipes.

A great way to avoid "writer's block" and ensure that you'll like the recipe you create, is to begin with a single ingredient that you already know you love, then mix it with a couple of ingredients that are known to "mix well with" your favorite ingredient.

For example, lets say you love Vanilla so you visit the Incense Ingredients Section, click on Vanilla and scroll down to the bottom of the page to find the category, "Mixes Well With." There you find the following:

Mixed Well With: benzoin, cassia, cinnamon, cloves, copal-black, mugwort, nutmeg, opoponax, palo santo wood, sandalwood, storax, sweetgrass, tolu balsam, tonka beans, vetiver, copaiba and Peru balsams, etc.

From this list you'd choose a couple of ingredients to mix with your Vanilla. So you would click on a few "Mixes Well With" ingredients and read about their characteristics and aroma descriptions. In this example you decide that a deep, rich, balsamic, vanilla-spice blend is the way to go today so you've chosen to add palo santo wood, storax bark, and tolu balsam to your vanilla.
A good starting point is to add each of the new ingredients in equal parts to each other. You decide however that a whole part of vanilla would probably be too overpowering, so instead you decide to add 1/4 part Vanilla.

Let's say you also don't happen to have any pure natural vanilla powder on hand, so instead you scrape out the inside of a few vanilla beans and add it to the mixture... flexibility is often the key ingredient to any incense recipe.

In this example your recipe would look like this:

1 part palo santo wood
1 part tolu balsam
1 part storax bark
1/4 part vanilla bean powder (natural only)

A "part" is any unit of measurement you wish to use, provided it's consistent throughout the entire recipe. We often use the conversion of 1 part = 1, 2, or 3 grams for small batches, and maybe 1 part = 5 to 10 grams for larger batches, etc. If you prefer, you can use powdered volume measurements with teaspoons, tablespoons and/or cups.

Prepare and mix these ingredients together as a loose incense mixture, let it sit overnight, then heat the incense, experience its aroma and make any adjustments to the recipe to suit your tastes.

In the end, the odds are very good you'll have a recipe that you enjoy because it's based on one of your favorite ingredients. Along the way you've also been introduced to a few new ingredients.

Like an onion, there is no center at arrive at, the beauty is in the layers, so just have fun.

**Step 1.** Begin with one of your favorite natural aromatic ingredients

**Step 1.** Visit the Incense Ingredients Section and find out which ingredients "Mix Well With" your favorite ingredient

**Step 3.** Check the aroma description, information, and properties of each "Mixes Well With" ingredient to determine if you'd like to add it to your recipe

**Step 4.** Choose 2 or 3 new ingredients that harmonize with your favorite ingredient and make a new recipe beginning with this basic formula:

1 to 3 parts of Your Favorite Ingredient
1 part New Ingredient #1
1 part New Ingredient #2
1 part New Ingredient #3

You can choose to add just one new ingredient if you prefer.

**Step 5.** Grind and Mix the ingredients
Step 6. Test burn the incense recipe on charcoal, trail, or stove, to see if you like the aroma

**Note:** The stove method offers the best opportunity for a slow examination of all the layers of fragrance in your incense without burning and charring the incense

Step 7. Adjust and test the recipe until satisfied

Step 8. Keep as a loose incense mixture or decide to make pellets, sticks, cones or molds

Have fun & enjoy!

http://www.youtube.com/watch?v=NzigbWmKkME

*How to make Incense sticks*

Incense sticks are used by many communities in the world daily for performing worships and for special occasion. In Asian countries used incense sticks in daily for their puja ceremonies. So it has good demand for this business. This Industry has long history and it can be setup with less investment. You require only low technology for manufacturing. Basically sticks are rolled by hands. If you can invest much money you can buy machines also. There are many different types of incense sticks used for different purposes or on different festive days.

**You’ll Need following things to made sticks**

Bamboo sticks - There are two difference sizes 7" and 10"

Wood glue - In Sri Lanka and India used wood power call "patta", "bummi powder" or Jigat powder.

Charcoal powder - burning wood powder

Unburned Wood powder - sawdusts

Sandalwood powder

Paint
Perfumes - fragrance oils
Most used fragrance oils are (Perfumes)

- Patchouli
- Sandalwood
- Jasmine
- Rose
- Mogra

How to Make Natural Incense

Learn how to make incense the old fashioned way; with all natural ingredients. Incense-Making.com is a FREE educational website that guides you step-by-step through the process of how to make incense.

We'll show you how to make incense for any occasion. Our extensive incense recipes section provides hundreds of sample recipes to get you started and our step-by-step guides will show you exactly how to make your own incense.

Many people are negatively affected by what they think is "incense" and avoid it altogether. This is because most commercially made incense is primarily or completely made of synthetic chemical ingredients, many of which are toxic when burned.

Incense is not about laboratory manufactured chemicals!

Incense is a celebration of nature!

The heating of nature's aromatic materials releases the volatile oils of the plant, tree, or flowers' immune system and enters our respiratory, bloodstream, brain, and neurological systems. It's nature's chemistry in action!

Natural incense ingredients; woods, herbs, spices, flowers, gums, resins, balsams and more have amazing affects on our brains, moods, and bodies!

Learn how to make natural incense and reawaken your ancient inner spirit. Connect to the rhythms of nature again and celebrate that you are nature.

Click here to get started and lets learn how to make incense!

Making Incense Start

Making incense is really quite simple, and outside of sheer enjoyment and motivation it requires just a few basic things:

1) Incense Recipe (or a pinch of this and that)

2) Fresh Natural Aromatic Ingredients
3) Mortar & Pestle / Grinder

4) Measuring Devices

5) Jars for storage

Once you've gathered these together, you're ready to begin making incense.

All incense making begins with the creation of a "loose," "non-combustible" mixture. This is simply the combination of two or more ground, granular, powdered, and/or chipped natural aromatic ingredients (herbs, flowers, seeds, spices, woods, bark, gums, resins, etc.)

Loose incense mixtures will rarely burn on their own, hence the term "non-combustible," and so they'll need a heat source to release their fragrance; more on this later. First let's create some incense, then we'll decide how we want to heat it.

This section will take you through the step-by-step process of making your own loose incense and once its completed, you can either heat it as is, or continue on to make incense sticks, cones, molds, pellets, or trails. So gather your enthusiasm, tools, and ingredients and let's get started making incense...

**Making Incense: Step-by-Step**

(photos coming soon)

<table>
<thead>
<tr>
<th>Step 1 - Measure, Grind, and Measure Again</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure each ingredient in your recipe either by weight using a scale (the preferred and more consistently reliable method), or by volume using measuring spoons and cups.</td>
</tr>
<tr>
<td>If using a weight scale, to make small recipe batches it's best to use a scale that measures by the gram (preferably by the tenth of a gram: 0.1 gram).</td>
</tr>
<tr>
<td>If measuring by volume, use spoons that measure 1/4 TSP, 1/2 TSP, 1 TSP, and 1 TBSP. Measuring cups can also be used for making larger batches of incense.</td>
</tr>
<tr>
<td>TSP=teaspoon</td>
</tr>
<tr>
<td>TBSP = tablespoon</td>
</tr>
<tr>
<td>In both cases, roughly measure the ingredients in their whole form first, then grind each and make your final measurement once the ingredients are ground. <em><strong>This is an especially crucial step if you're measuring by volume.</strong></em></td>
</tr>
</tbody>
</table>
## Grinding Tips

Grind each ingredient separately using a mortar and pestle (absolutely required for all gums and resins) and/or a hand-crank grinder or mill.

If you're making **loose incense, incense trails, or pellets**, then grind all ingredients to a **small granular form**, about the consistency of sea salt or coarse sand. You may powder it all if you like, but it's not required.

If you're making **incense sticks, cones, or molds**, then all ingredients must be ground to a **very fine powder**. This allows the sticks, cones or molds to burn more reliably and evenly. Sift the ground powders though a small metal sifter/strainer to make sure all larger grains have been removed.

### Gums & Resins:
Freeze slightly gummy resins for 15 to 30 minutes prior to grinding for faster, easier, and more efficient grinding. Very soft gum resins like labdanum and elemi are best frozen overnight.

Resins must be ground or powdered in a mortar and pestle. They will clog, destroy and ruin any grinder, mill, blender, processor, etc. you put in their path. The old fashioned way is still the only way. There are expensive commercial-grade grinders that could do the job but this web site is about making incense for personal use.

We prefer using a large solid granite mortar and pestle for the heavy work of grinding resins. Some soft gum resins may stick to the granite so freezing the mortar and pestle as well as the gum resins prior to grinding can help prevent this.

For gum resins that soften very quickly even when frozen, like labdanum, galbanum, and elemi, we prefer using a "seasoned" Molcajete mortar and pestle. A Molcajete is a traditional mortar and pestle from Mexico made from porous volcanic rock which you "season" by grinding in pre-soaked white rice to coat the pores. This helps prevent soft gum resins from sticking to the walls.

**Tip:** Adding the powdered woods or spices portion of a recipe, if any, to the soft resins as you're grinding them can help keep the resin mixture dry and separated.

### Woods:
Woods can be very difficult to powder and doing so can be a path
of great patience and attention.

If you're making incense sticks, cones or molds, it's often easier to purchase woods already in powder form.

If you're making loose incense, it's okay to use small wood chips about the size of grains of rice. Powders work well too but aren't necessary to make and heat a loose incense mixture.

To grind woods use a small hammer and wood chisel to chip the wood into smaller and smaller pieces. Once into very small, rice-size chips or shavings, woods can then be ground into powders using coffee grinders or grain mills, either manual or electric.

**Herbs, Spices and Flowers:**
These are usually easily ground in coffee grinders or mills, either electric or manual. Though sometimes hard, whole pieces of ingredients like cloves, cinnamon sticks, nutmeg, musk seeds, etc. are often best ground in a mortar and pestle first and then run through a grinder or mill. Experiment with what works best for the ingredients you're using.

**Fruit:**
Orange, lemon, lime and other citrus peels can be ground from the fruit by rubbing a cheese grater across the peel of the fruit. Scatter cut peels on a screen, wax paper, cutting board, or cardboard and let dry, turning occasionally. These dried peels can then be used as is for making loose incense, or can be ground into powders in a coffee mill for making incense sticks, cones or molds.

Dried fruits such as raisins, apricots, plums, quince, etc. can be used alone or soaked in wines and drizzled with honey then added to incense mixtures to create incredibly delicious soft kneaded incense pellets

**Step 2 - Mix**
Combine the final ground and measured ingredients together as one mixture and grind it around a bit in the mortar and pestle to help "merge" the aromas.

**Step 3 - Heat & Test**
Congratulations, you've now made your very own "loose," "non-combustible" incense! You're ready to heat it and enjoy the fruits of your labor (and the labor of the many who harvest, grow, and
bring these ingredients to us all).

Even if you plan to continue on and make kneaded incense pellets, trails, sticks, cones or molds with this incense it's best to stop right now, heat it and see if you enjoy the aroma and/or energy of the incense. If it's not to your approval, make adjustments now before moving on.

There are three basic methods you can use to heat your loose incense mixture; you can use incense charcoal, incense trails, or an incense stove. Click on each title to learn more.

**Step 4 - Make Adjustments**

Once you've heated your loose incense you can make adjustments to the recipe to suit your own tastes and desires. This is a completely subjective step in the process of making incense and so only your own nose, instincts, and experience can guide you.

Continue testing and adjusting the recipe until you're completely happy with the results.

**Step 5 - Finished or Moving on?**

If you want only a loose incense blend for your uses then congratulations you're done! You've made your very own all natural incense... enjoy! Click here for information on how to heat your loose incense.

Scoop the entire mixture into a glass jar, seal it closed, label it and let it stand at least overnight in a dark, cool space (a drawer or closet usually works well). The aging process allows the entire mixture to "synergize," or merge together as one complex aroma. Aging for several days or weeks will create a more matured, blended, and complex aroma.

An unglazed ceramic pot and lid is the ideal storage container. Since ancient days such pots have been buried near streams to age incense for months and even years.

If you want to make incense pellets, trails, sticks, cones or molds, there's a little more work to do... and now you're prepared to move on to the steps necessary for making those types of incense.

Click below for step-by-step guides for making each type of incense:

Incense recipes are simple to create and easily designed for the uses you desire. This section provides step-by-step guides to help anyone make wonderful all-natural incense.

Create incense recipes for meditation and relaxation or for inspiration and creativity. Let the seasons inspire you or tune into nature's astrological and energetic properties. Cleanse a space and create a healthier living
environment, and much more...

The incense recipes table below is where to begin creating your own fantastic blends. Each section includes sample recipes to get you started and guides you through the entire process, step by step.

Click on any category title listed below to begin creating your own incense recipes!

- **Ingredients You Like**
- **Locally Grown Ingredients**
- **Emotional Attributes**
  - Meditation
  - Prayer
- **Seasonal**
  - Elements
  - Healing
  - Astrological Signs
  - Magical Properties

---

**Incense Ingredient Profiles**

(click on any ingredient title for a detailed profile)

see also: ingredients listed by note

<table>
<thead>
<tr>
<th><strong>Base Note</strong></th>
<th><strong>Middle or Heart Note</strong></th>
<th><strong>Top Note</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agarwood</td>
<td>Basil</td>
<td>Bay Laurel</td>
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<tr>
<td>Amber</td>
<td>Borrow Camphor*</td>
<td>Cardamom</td>
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<tr>
<td>Ambrette Seed</td>
<td>Calamus</td>
<td>Coriander</td>
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<tr>
<td>Balsam of Tolu</td>
<td>Catnip</td>
<td>Eucalyptus</td>
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<tr>
<td>Benzoin</td>
<td>Chamomile</td>
<td>Galangal**</td>
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<tr>
<td>Borneol Camphor*</td>
<td>Cinnamon</td>
<td>Ginger**</td>
</tr>
<tr>
<td>Burgundy Pitch</td>
<td>Clove</td>
<td>Hibiscus</td>
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<tr>
<td>Cassia</td>
<td>Colophony Pine</td>
<td>Laurel</td>
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<tr>
<td>Cedarwood</td>
<td>Dammar*</td>
<td>Lavender**</td>
</tr>
<tr>
<td>Cedarwood - Red</td>
<td>Elemi*</td>
<td>Marjorram</td>
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<tr>
<td>Copal - Black</td>
<td>Galbanum</td>
<td>Nutmeg</td>
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<tr>
<td>Copal - Gold</td>
<td>Guggul</td>
<td>Pine Needles</td>
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<tr>
<td>Copal - White</td>
<td>Juniper*</td>
<td>Rosemary</td>
</tr>
<tr>
<td>Dammar*</td>
<td>Labdanum</td>
<td>Saffron**</td>
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<tr>
<td>Dragon's Blood</td>
<td>Mastic</td>
<td>Star Anise</td>
</tr>
<tr>
<td>Elemi*</td>
<td>Musk Seed</td>
<td>Sweetgrass**</td>
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<tr>
<td>Frankincense</td>
<td>Myrrh</td>
<td>Thyme</td>
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<td>Galbanum</td>
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<td>Guggul</td>
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<td>Juniper*</td>
<td>Onycha (fixative)</td>
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<tr>
<td>Labdanum</td>
<td>Palo Santo*</td>
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<tr>
<td>Makko</td>
<td>Patchouli</td>
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<tr>
<td>Mastic</td>
<td>Sage-Desert*</td>
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<td>Musk Seed</td>
<td>Sage-White</td>
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<tr>
<td>Myrrh</td>
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<td>Oakmoss</td>
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<td>Opoponax</td>
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<tr>
<td>Spikenard</td>
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* = Threatened Species Alert: The 2007 IUCN Red List of Threatened Species now includes this species.

Ingredients Listed by Note
<table>
<thead>
<tr>
<th>Sweet Grass</th>
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**Hierochloë odorata**

**Description:** One of 15 species of the genus, Sweetgrass is a fragrant perennial grass which grows in damp areas of the northern hemisphere.

Sweet grass is treasured by the Sioux, Cherokee, Blackfoot, Lakota and other native American peoples and associate the scented grass with the compassionate creation goddess Wohpe. Sweetgrass braids are often hung over doorways inside a home to invite positive spirits. It’s often used to weave baskets and incense inside.

In Europe, sweetgrass is held sacred of the Virgin, used as a strewing herb on church stairways during saint days, and to scent clothes during festivals.

Sweetgrass is easy to grow yourself and invokes the spirit of Spring.

**Family:** Poaceae

**Synonyms:** Holy grass, vanilla grass, Seneca grass

**Origin:** North America and Europe

**Parts Used:** dried leaves

**Aroma Description:** strong pleasant vanilla, newly-mown hay scent, with a slight hint of coconut

**Emotional Attributes:** cleansing/purifying, relaxing

**Cosmetic Uses:** perfumery, aromatherapy; excellent fixative properties

**Culinary Uses:** leaves are added to vodka for flavoring (*zubrowka*), oil is used to flavor candy, soft drinks, and tobacco. Due to its high content of coumarin, it’s prohibited by the US FDA and other countries for use in foods and permitted only in alcoholic beverages and tobacco.
**Medicinal Attributes:** none known

**Element Association:** Water

**Magical Associations:** healing, spirituality, peace, friendship

**Astrological Association:** Libra

**Planetary Association:** Moon, Venus

**Season:** Spring, Summer

**Aromatic Note:** Middle to Top note

**Essential Oil:** Yes, a steam distilled essential oil is made from the leaves

**Mixes Well With:** often used by itself, lighting one end, gently fanning out the flame and enjoying its pleasant aroma. Also blends well with benzoin, cedar, copal-black, copal-gold, copal-white, juniper, lavender, sage-white, sage-desert, tolu balsam, vanilla, etc.

---

**Cedarwood - Red**

*Juniperus virginiana*

**Description:** This species actually belongs to the *Juniperus* genus. A coniferous ornamental tree important to the lumber and furniture industries. For incense, Red Cedarwood is mostly used as a burning base for making sticks and cones.

**Family:** Cupressaceae

**Synonyms:** none known

**Origin:** Much of the Northern Hemisphere

**Parts Used:** wood

**Aroma Description:** woody with hints of pine and citrus, slightly sweet

**Emotional Attributes:** love, strengthening, cleansing/purifying

**Cosmetic Uses:** none known

**Culinary Uses:** none
**Medicinal Attributes:** used to be used to treat coughs, colds and headaches. Now considered too toxic for medicinal use.

**Element Association:** Fire

**Magical Associations:** healing, protection, prosperity

**Astrological Association:** Aries, Leo, Sagittarius

**Planetary Association:** Sun

**Season:** Summer

**Aromatic Note:** Base note

**Essential Oil:** Yes, but extremely toxic. May cause irritation and allergic reactions.

**Mixes Well With:** amber, burgundy pitch, calamus, cardamom, chamomile, hyssop, iris root, juniper, lemon balm, oakmoss, patchouli, pine needles, pine resin, rosemary, white sage, desert sage, sandalwood, sandarac, spikenard, tolu balsam, turmeric, valerian root, vetiver, guaiacwood, orange peel, etc.

---

**Desert Sage**

*Artemisia tridentata*

**Description:** Woody shrub species of the Artemisia family. This is the traditional desert sage used in Native American incense. Desert sage is used extensively in incense smudges and wands. It’s often confused with white sage, which is less widely found in North America and was used primarily by southwestern North American tribes during sweat lodges.

**Family:** Asteraceae

**Synonyms:** basin sagebrush, big sagebrush, common sage, sagebrush

**Origin:** northern temperate regions, South America, South Africa

**Parts Used:** dried leaves

**Aroma Description:** herbaceous aroma with slight underlying fruity notes

**Emotional Attributes:** cleansing/purifying, strengthening, creativity

**Cosmetic Uses:** used in sachets, powders
Culinary Uses: none known

Medicinal Attributes: bitter, warming herb that improves digestion and liver function, relaxes spasms, and destroys intestinal worms

Element Association: Air

Magical Associations: protection, dreams

Astrological Association: Virgo, Pisces, Sagittarius, Capricorn

Planetary Association: Jupiter, Saturn

Season: Spring, Summer

Aromatic Note: Base to Middle note

Essential Oil: none known

Mixes Well With: bay laurel, burgundy pitch, cedar, copal, hyssop, juniper, lavender, lemon grass, marjoram, mastic, mugwort, pine, rosemary, sage-white, sweet grass, thyme, lemon peel, orange peel, etc.

Basic Incense Tools

- Incense Burners
- Fill the Burner
- Incense Charcoals
- Mortar & Pestle’s
- Grinders
- Scale / Measuring
- Kodo
- Utensils
- Mica
- Koh Press
- Extruders
- Storing Ingredients

The Incense Burner
Before beginning you need a fireproof incense burner. What kind of burner you need depends on what kind of incense you wish to burn.

Any ceramic or metal cup or bowl works great, as do large sea shells or rocks with natural bowl forms... the choices are virtually unlimited. They key element is the containment of heat and protection from burns and fire. You allow fire in the form of burning coals and incense on the inside but you don't want the hot coals, heat, or ash to exit the burner and start a
fire. Always think safety first.

If using a ceramic or metal incense burner, then something with legs or feet is preferred. Legs lift the hot bottom of the burner off of the surface where it’s placed and allows for airflow between the two surfaces which in turn cools and protects them both. In some eastern traditions the three legs of the burner represent mind, body, and spirit.

Shells and rocks or other items without feet can be placed on a ceramic tile or a piece of slate or stone, etc. for heat protection (preferably these items also have small pads or feet affixed to them).

**Fill the Burner: Ash, Sand, Crushed Rock, or Salt?**
Most incense burners work best and are safest if they’re half-way to three-quarters filled with either Ash, Sand, Crushed Rock, Sea Salt, etc. These greatly reduce the heat the burner will absorb and give off, making it a safer burner to use.

We like using white chaff ash to fill our burners because it can be used for burning sticks, cones, pellets, or loose incense, using charcoals, trails, and even the elegance of Kodo style.

Ash allows charcoals and trails to breathe from all sides even if the coal is partially or fully buried. This is a huge advantage over sand, rock or salt which offer no air circulation from below.

Pure, fine quality White Chaff Ash is made specifically for incense burners can usually be found wherever Japanese incense is sold.

**No Fill in Burner:**
The incense burner can also be used with no filler; using just a lit incense charcoal placed in the middle of the burner and the incense sprinkled on top of, or right next to, the hot charcoal (once it’s completely red-hot the coal will appear grey all over).

**Caution:** Not using a filler in the incense burner produces a very hot incense burner which should never be handled once used. This style can be dangerous and brings a high risk of burns and fire hazards.
**Incense Charcoal**
Many commercial incense charcoals contain toxic chemicals such as saltpeter (sodium or potassium nitrate), sulfur, etc. These can usually be identified by the charcoal crackling or sparking when lit, and/or by the odors it exudes.

We prefer using chemical-free natural charcoals. Any natural wood or root charcoal will work as long as it’s free of chemical additives.

So far the best chemical-free natural charcoals we’ve found are made of bamboo or natural roots and come from Japan. You can usually find them wherever Japanese incense is sold.

*Tweezers are an ideal tool for handling charcoals while lighting and transferring to the incense burner.*

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**Mortar & Pestle’s (for Gums & Resins, Seeds)**
We prefer using a large solid granite mortar and pestle for the heavy work of grinding resins.

*clean with alcohol

Soft resins may stick to the granite so freezing the mortar and pestle as well as the gum resins prior to grinding can help prevent this. We freeze most resins for 20-30 minutes prior to grinding. Soft gummy resins require more time and are best frozen overnight.

For gum resins that soften very quickly while being ground even when frozen, like labdanum and elemi, we prefer using a "seasoned" Molcajete mortar and pestle. A Molcajete is a traditional mortar and pestle from Mexico made from porous volcanic rock which you can "season" by grinding in pre-soaked white rice to coat the pores. This helps prevent soft gum resins from sticking to the walls.

*clean by grinding plain, uncooked white rice through it as needed. Alcohol can also be used to clean a Molcajete.*

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### Grinders (for Herbs, Roots, Seeds, Spices, Flowers)
There are any number of grinders that will work in making incense. We use a few different grinders. The strength of "steel burrs" for grinding is the only requirement.

Hand-crank coffee mills with steel burrs

*clean by grinding plain, uncooked white rice through it as needed.

Hand-held Herb Grinder (herbs & flowers only - no seeds)

Electric Grinder with steel burrs

*clean by grinding plain, uncooked white rice through it as needed.

### Scale / Measuring Spoons
We prefer measuring by weight and using a scale that measures by as little as one-tenth of a gram (0.1 gram) to allow for small recipes to be made. Recipes by weight seem to be more reliable for consistency because volume measurements greatly depend upon granular size.

If measuring by volume, use spoons that measure 1/4 TSP, 1/2 TSP, 1 TSP, and 1 TBSP. Measuring cups can also be used for making larger batches of incense.

TSP=teaspoon  
TBSP = tablespoon

In either case, roughly measure the ingredients in their whole form first, then grind each and make your final measurement once the ingredients are ground. ***This is an especially crucial step if you're measuring by volume.***

### Kodo Utensils
The utensils used in the Japanese incense ceremony, Kodo. These utensils are usually sold in sets and a complete set contains (from top to bottom) a framed mica plate, an ash press, metal chopsticks, feather, incense handler, ash skewers, scoring sheet pin, and a mica plate holder. Click here for "How to prepare a Kodo Cup" and see the utensils in action.
### Mica - Raw

Raw Mica rocks can be found in the wild, in most gem & mineral shops, and all over the web. Each "mica rock" is comprised of many thin layers of this glass-like mineral compressed against each other. These are easily separated with an art knife, cut to length with scissors, and used for heating incense and making incense stoves.

### Koh Press

A small shaped block used to press an indentation into the ash of an incense burner and allow that indentation to be filled with *incense and burned as a trail*.

### Extruders

Clay guns, beef-jerky and sausage extruders, and sugar-paste guns, etc. can be used as extruders to make incense sticks of all shapes. Stuff the gun with *incense dough* and squeeze the lever to create perfectly shaped sticks.

*Check with the manufacturers of these extruders for the various "dies" they may offer to produce thinner, thicker, or shaped-edge sticks.*

### Storing Ingredients

Store all natural ingredients and incense mixtures in colored glass or ceramic jars and keep them in a cool, dark, dry space. Interior closets usually work well.

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### Incense Sticks

#### Making Sticks, Cones, Molds

To make incense sticks, cones, molds, or trails, you first must begin with a finely powdered incense mixture called *loose incense or non-combustible incense.*
If you already have your powdered loose incense mix then you're ready to continue on with these step-by-step instructions and create your own incense trails, sticks, cones, or molds.

If you're making incense trails, you need only go to step 6 on this page, Do not go on to wet your incense. When you arrive at step 7 stop and proceed to how to burn incense trails (this is noted along the way for you).

### Making Incense Sticks, Cones, Molds, and Trails Step-by-Step

**Photos coming soon...**

<p>| | | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1</td>
<td>grind each of your incense ingredients into a fine powder (or buy pre-powdered ingredients)</td>
<td>photo</td>
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<tr>
<td>2</td>
<td>sift your powder through a flour sifter – using only the fine powder for your mix</td>
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<td>3</td>
<td>combine all ingredients into a bowl</td>
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<td>4</td>
<td>add a percentage of makko powder to incense powder</td>
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<td></td>
<td><strong>Note:</strong> high resin content in your recipe means it will need more makko to make it burn (add 40-90% makko for high resin mixtures), incense made with mostly woods, spices and herbs will need only 5-30% makko</td>
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<tr>
<td></td>
<td>weight of mixture x percent of makko = weight of makko needed</td>
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<td></td>
<td><strong>Example:</strong> If your mixture is all resins and weighs 20 grams test it with 70% makko: 20 grams incense x 70% makko (20 x .70) = 14 grams of makko is needed to add to 20 grams of incense</td>
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<tr>
<td></td>
<td>the percentage of makko needed changes with every recipe as each ingredient has its own burning qualities, etc. Trial and error is the only way to find the perfect amount of makko to add. Keep records if you plan to repeat a recipe.</td>
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</tr>
<tr>
<td>5</td>
<td>combine makko and powdered incense and mix thoroughly</td>
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<tr>
<td>6</td>
<td>it's best to test the mixture now by burning it as an incense trail. - if it burns slow and steady as a trail then it will also burn just fine once its moistened, made into a dough, and formed into sticks, cones, or molds</td>
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<tr>
<td>7</td>
<td>if the incense trail doesn't burn well or goes out - add more makko</td>
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<tr>
<td></td>
<td>if the incense trail burns too fast with a mostly makko aroma, add more</td>
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</tbody>
</table>
incense mixture

fine-tune the aroma to your tastes by adjusting the amount of each ingredient

test recipe again by burning trails

keep adjusting and testing until you have that final recipe and it's time to move on...

*if keeping records, remember to record all your recipe changes

Store the final mixture in colored glass jar, in a cool, dark, dry space for 48 hours or more - this helps all the ingredients merge their aromas together as one – to synergize. (You can also wrap a clear jar with newspaper to keep light out)

*If you're making incense trails, STOP now and enjoy! (How to Burn Trails)

<table>
<thead>
<tr>
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<th>Ready to Make a Dough &amp; Shape:</th>
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<tbody>
<tr>
<td>8</td>
<td>set aside 10% of this combined dry incense/makko mixture in a separate bowl, leave this as emergency backup mix</td>
</tr>
<tr>
<td>9</td>
<td>in a small bowl, very slowly drizzle in warm distilled water into the remaining 90% of your prepared dry incense/makko mix</td>
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<tr>
<td>10</td>
<td>you can use hydrosols, essential oils, wines, liqueurs, etc. as a replacement for, or in addition to, the water content in step 9</td>
</tr>
<tr>
<td>11</td>
<td>knead the warm water into the mixture until you create a dough about the consistency of soft sculptor's clay... remember Play-doh?</td>
</tr>
<tr>
<td>12</td>
<td>you should be able to make a fist and have the moist but not slimy wet dough squeeze through your fingers but be firm enough to maintain its new shape without revealing any dry cracks inside</td>
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<td></td>
<td>workable but not wet is the goal</td>
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<tr>
<td></td>
<td>slowly add more water if the dough is too dry but do so very carefully because too much water quickly makes the mix too soupy and unworkable.</td>
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<tr>
<td></td>
<td>If you do add too much water, pour what liquid you can out of the bowl, then add some of your emergency backup dry mix from step 8</td>
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<tr>
<td>13</td>
<td>knead the dough... knead, knead, knead... knead is all you need...</td>
</tr>
<tr>
<td>14</td>
<td>now it's best to age the dough in a bowl overnight. cover it with a damp towel and wait 24 hours</td>
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<tr>
<td>15</td>
<td>the next day – knead the dough again, and if needed, slowly add more warm liquid (a spray bottle works best here)</td>
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<tr>
<td>16</td>
<td>knead, knead, knead...</td>
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<tr>
<td>17</td>
<td>pinch off a small piece of dough, roll it in your hands into a ball, place it down on a large flat surface that can be cleaned afterwards – i.e. cutting board, table, tile, etc.</td>
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<tr>
<td>18</td>
<td>with the palm of your hand roll the ball top to bottom, first away from and then back towards you, and begin forming a stick</td>
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<tr>
<td>19</td>
<td>now switch from using your hands to using the bottom part of a small box that fits in your hand</td>
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<td></td>
<td>you want the straight flat bottom of a small box to replace your squiggly shaped hand for rolling the sticks - it makes for straighter sticks. Of course you may enjoy the squiggle's, in which case by all means feel free to use your hands or other inventive devices</td>
</tr>
<tr>
<td>20</td>
<td>roll the box bottom back and forth over stick and form to size and thickness desired</td>
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<tr>
<td></td>
<td>*using extruders can be lots of fun as well and is great for those who wish to experiment more... we've found meat jerky and clay extruders work well</td>
</tr>
<tr>
<td>21</td>
<td>use a butter knife to cut the ends – we usually keep cutting them until our sticks are about 4” long – shorter sticks help prevent curling in the drying stage, we call 'em &quot;incense logs&quot;</td>
</tr>
<tr>
<td>22</td>
<td>roll your sticks until the thickness is anywhere from slightly thinner than a pencil at the thickest, to very thin like spaghetti – keep in mind the thinner they are, the more difficult they are to keep straight during drying</td>
</tr>
</tbody>
</table>
|23 | **drying sticks** (bag method)  
  carefully lay the rolled sticks on a small cutting board covered with wax-paper - keep the sticks as straight as possible (use your fingers and the dull edge of a butter knife to help) - place the whole board in a large paper bag and scrunch it closed (or use clips)  
  alternative: you could use various sized "U" shaped wood-chisels to carve "stick grooves" into a flat wooden board - this can help prevent thin or long sticks from curling during the drying stage |
|24 | at least once daily, preferably two or three times, open the bag and spin the incense a 1/4 turn like you would a hot dog on a barbeque grill (this helps them dry evenly) - then return everything into the paper bag and close the end of the bag - allow the drying to continue - repeat often until dry |
|   | sticks usually take 1 to 5 days to dry, depending on your local climate - slower is better so if you like tinkering then building a better drying environment is a great experiment; controlling heat, humidity, and air flow |
25

**for cones** pinch off some dough and simply mold it in your hands making whatever shape you like, be aware that anything much thicker than a pencil at the base may not burn very well.

you can also make wooden or metal cone molds and mass produce cones - ask a carpenter or metal-smith friend

26

**dry cones** by standing up on a wax-paper covered board and place the whole thing in a paper bag and scrunch closed – once the outside of the cones are dried you can turn them on their sides to better dry the bottom and inside, check and turn several times daily

**Note:** an added bonus of working with makko is that if your sticks, cones, or molds don't burn well for any reason, you can simply grind it all back into powder again, adjust it, test it, wet it, knead, form, dry, burn and enjoy – no waste! No bad incense.

As you can see we don't use wooden "blank" sticks. Many such commercially available sticks are all too often dipped in arsenic and/or formaldehyde or other preservatives and chemicals. They're often rolled in glue and sawdust from some unknown tree, etc. We prefer our incense infused only with the pure powers and aromas of nature and the freedom to shape it as we please.

As far as what ingredients to start with, we really recommend starting with ones you already enjoy: heat them one at a time and notice the many different kinds of aromas that are within that one, single ingredient... do you smell any citrus? rose? jasmine or other flowers, woods, green grassy herbs, etc.? If so, try adding ingredients that are similar to what you smell; if you smell grass try adding some vetiver, if you smell flowers try rose petals or dried lavender, etc.

Have Fun!

**How to Burn Sticks, Cones, or Molds**

**Making Incense Pellets** (a.k.a. Kneaded Incense, Moist Incense, Awasekê, Nerikoh, Bakhoor, etc.)

Kneaded Incense Pellets are one of our favorite types of incense to make because the whole world of natural aromatics opens up and can now be used in making your incense.

Soft gummy resins like elemi, galbanum, labdanum, etc., which are difficult or impossible to use when making sticks or cones are now ideal for making incense pellets. You can also use honey, liquid balsams, essential oils, wines, dried fruits, etc.

To make kneaded incense pellets you first begin with a granular incense mixture called "loose or non-combustible incense." You don't want it powdered all the way, a coarse granular form like sea salt is preferred. Click here to create loose incense.
We classify kneaded incense pellets into three categories because they each have their own way of being made. Methods can also be combined. This is not incense law, just our own general guidelines. Click on titles for step by step guides on each:

- **Honey Method**
- **Dried Fruit & Honey Method**
- **Soft Resins Method**

It's important to know that incense pellets should not be "burned" using direct heat. **Indirect heat** is the preferred and ideal method to release the fragrances within incense pellets. Honey and other ingredients will give off poor aromas if burned instead of gently heated. For more on this, click on "How to Heat Incense Pellets".

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## Making Incense Pellets
### Step - by - Step

Photos coming soon...

### Honey Method

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>grind each of your recipe's dry incense ingredients into coarse granules like sea salt and combine in a bowl <em>(performed while making loose incense)</em></td>
</tr>
</tbody>
</table>
| 2    | slowly drizzle in tiny amounts of honey until the mixture can be kneaded together as one, mix well by kneading more  
you can add essential oils & balsams during this stage if you like |
| 3    | pinch off small pieces and roll into a pea-sized pellets |
| 4    | place pellets on a board covered with wax paper to dry, enclose the whole board inside a large paper bag, close the end of the bag  
turn pellets twice daily to help dry evenly |
| 5    | once pellets are dry enough to be handled, place them in a sealed unglazed ceramic or glass jar but in one layer only, for at least 48 hours  
**Important:** do not stack honey pellets on top of each other or they will stick together and merge into a single mass, use a single layer  
the longer you age the mix, the more it will develop and refine itself, the |
In Japan they make a kneaded incense called Nerikoh which uses dried plums and honey as the binder and they age the mix in an unglazed ceramic pot buried near a stream... sometimes for years.

Alcohol can be used to clean your tools.

Your incense pellets are ready for enjoyment!

## Dried Fruit & Honey Method

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Grind each of your dry incense ingredients into coarse granules, like salt (performed while making loose incense)</td>
</tr>
<tr>
<td>2</td>
<td>In a large bowl add your raisins or other dried fruit. Measure roughly one part dried fruit to one part incense. A &quot;part&quot; is any unit of measurement you wish to use, provided it's consistent throughout the entire recipe. We often use the conversion of 1 part = 1, 2, or 3 grams for small batches, and maybe 1 part = 5 to 10 grams for larger batches, etc. If you prefer, you can use powdered volume measurements with teaspoons, tablespoons and/or cups.</td>
</tr>
<tr>
<td>3</td>
<td>Cover dried fruit with wine (we like red wines), liquid should be at least 1&quot; over the level of fruit to allow for absorption. You can experiment with wines, liqueurs, hydrosols, essential oils, etc. Let soak overnight.</td>
</tr>
<tr>
<td>4</td>
<td>Use a strainer to drain liquid from fruit. While wearing latex or rubber gloves, hand press out excess liquid in fruit.</td>
</tr>
<tr>
<td>5</td>
<td>Combine drained fruit with prepared loose incense mixture.</td>
</tr>
<tr>
<td>6</td>
<td>Mix thoroughly... knead... knead... You can use a mortar and pestle, a bowl and your hands, or a food processor or blender to mix. The fruit should shred apart and mix thoroughly with the incense blend.</td>
</tr>
<tr>
<td>7</td>
<td>Slowly drizzle in enough honey to bind the incense together into a dough that sticks together well. The honey acts as both an additional binder and as a preservative.</td>
</tr>
<tr>
<td>8</td>
<td>Knead, knead, knead...</td>
</tr>
</tbody>
</table>
### Soft Resins Method

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Grind each of your dry incense ingredients into coarse granules, like sea salt. <em>(Performed while making loose incense)</em></td>
</tr>
<tr>
<td>2</td>
<td>Wear latex, plastic, or rubber gloves</td>
</tr>
</tbody>
</table>
| 3    | **a) soft gummy ingredients** like elemi need to be spread out the in a large bowl or on a cutting board covered securely with wax paper *(can later be cleaned with alcohol)* create a flat layer with the ingredient as if you were icing a cake, evenly sprinkle the loose incense mixture over the entire flattened soft ingredient. 

**b) sticky resins** like labdanum or hard galbanum are best frozen then quickly ground by mortar and pestle, they soften quickly so you have to be fast and then repeat the freeze and grind until the consistency desired is achieved - the granular or powdered ingredient can then be added like a dry ingredient to the rest of your already prepared mixture and depending on percent of sticky resins it will either form gummy pellets or a dry mix.  

**c) liquid balsams and resins** like Copaiba and Peru Balsams can be poured over your incense and kneaded into it. spread out your prepared loose incense mixture in the bottom of a bowl and drizzle the liquid balsam resin all over it.  

Soft resins like soft galbanum are easiest to use when warmed - heat in a hot water bath - place sealed jar of galbanum into bowl of hot water, about... |

---

**Once pellets are dry enough to be handled, place them in a sealed unglazed ceramic or glass jar but in one layer only, for at least 48 hours.**

The longer you age the mix, the more it will develop and refine itself, the better it will be.

In Japan they make a kneaded incense called Nerikoh which uses dried plums and honey as the binder and they age the mix in an unglazed ceramic pot buried near a stream... sometimes for years.

Alcohol can be used to clean your tools.

Your incense pellets are ready for enjoyment!
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<td>half-way up the galbanum jar</td>
<td></td>
</tr>
<tr>
<td><strong>4</strong></td>
<td>you can experiment with adding honey, balsams, essential oils, etc.</td>
</tr>
<tr>
<td><strong>5</strong></td>
<td>wear latex, plastic, or rubber gloves</td>
</tr>
<tr>
<td></td>
<td>mix thoroughly... then knead, knead, knead...</td>
</tr>
<tr>
<td><strong>6</strong></td>
<td>pinch off a small piece and roll it in your hands to make a pea-sized pellet</td>
</tr>
<tr>
<td></td>
<td>*depending upon the recipe and fruit used, you may not be able to bind the mix together, in which case it can be left alone and stored as a loose incense mix or... you can add a sticky binder like honey or a balsam to help it knead and form into pellets</td>
</tr>
<tr>
<td><strong>7</strong></td>
<td>place pellets or the loose mix on a board covered with wax paper to dry, enclose the whole board inside a large paper bag, close the end of the bag</td>
</tr>
<tr>
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<td>turn pellets or mix twice daily to help dry evenly</td>
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Have Fun!

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**Incense Trails**

Incense trails are an ancient Chinese style of burning incense and have been used for thousands of years all over Asia. Powdered incense is laid out in a trail and lit, somewhat like a gunpowder trail would burn.

This incense trail method of burning incense was the principle means of measuring time in ancient Asia. The sun-dial clock evolved into the incense clock... exacting recipes burned evenly in trails while markers tracked time. At a time when much of the world was using water
clocks, China had perfected the incense clock, and most incense clocks used trails.

These trails were created using three-piece "Incense Seals." One piece was your base burner and held a bed of ash, the second was the female template with the trail pattern cut out of the template, and the last piece was the male template with a protruding pattern which was pressed through the female template and into the ash then and removed. This would produce a depressed pattern in the ash.

The female template remained and depressed pattern in the ash was then filled with the incense mix and very lightly pressed again with the template. Both templates are removed and the result was an incense trail beautifully laid out in a bed of ash. These Incense Seals and the incense patterns they created were, and still are, quite beautiful and elaborately detailed (see left column of this page - "The Trail of Time" written by Silvio Bedini - a wonderful text on the subject).

Trails and their burners need not be so elaborate though, this style can be easily enjoyed with any simple incense bowl or cup filled with ash. Ash lets the trail breathe from all sides, sand and other mediums will not work.

The key ingredient to using trails is Makko, which is the name for the powdered bark of the tabu-no-ki tree in China. Makko has excellent natural combustible properties making it ideal for burning incense. It burns steady but with less heat than wood charcoals and so more layers of fragrance of an ingredient are revealed to the user. Makko is also a natural binder when wet, making it invaluable for forming your own incense sticks, cones, molds, etc.

Sandalwood, Red Cedarwood, Pine, Juniper, and other powdered woods by themselves or combined will also burn well as a trail.

The use of Incense Trails is virtually required when making incense sticks and cones because it's much wiser to test and adjust these mixes as dry trails before employing the labor to wet the mix, knead a dough, form sticks or cones, and dry them.

To make incense trails you only need to go to Step 7 of "How to Make Incense Sticks, Cones, and Molds" instructions. When you arrive at step 7 stop and proceed to how to burn incense trails (this is noted at each spot). Have fun!

How to Make Incense
By an eHow Contributor
Make Incense

*It's easier to buy it already made, but you can make your own.*

**Other People Are Reading**

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- How Working Moms Make It Work

**Things You'll Need**

- Bamboo Skewers
- Eucalyptus Powders
- Ground Benzoin

Show (16) More

**Instructions**

1. **Preparing the Incense**

   1. Put on your gloves.

   2. Put 1 tsp. gum arabic in about 8 oz. warm water and mix thoroughly. This is the mucilage. It should absorb enough water to become a thick paste. If it's too dry, add more water a little at a time.

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Note that if you plan on making incense sticks, the consistency should be like oatmeal. For cones, it should be a bit thicker, like pudding.

Cover the mucilage with a hot, wet dishcloth and set it aside.

Make the incense base by blending 6 tbsp. powdered sandalwood, 2 tbsp. ground benzoin and 1 tbsp. ground orrisroot.

Use an eyedropper to add 6 drops of the essential oil(s) of your choice in any combination.

Mix the oils in thoroughly with your hands.

Add 1 1/2 tbsp. myrrh, 2 tbsp. sandalwood, 1/2 tbsp. eucalyptus and 3 drops lemon oil to form a fine, powdery mixture.

Use a kitchen scale to weigh the incense.

Add 10 percent of that weight in saltpeter (potassium nitrate). For example, if you have 10 oz. incense, add 1 oz. saltpeter.

Mix the saltpeter in completely.

Check the mucilage. It may have thickened as it sat. If that's the case, stir in a little bit of water.

Add the mucilage a little at a time. Keep adding it until the powder is thoroughly dampened.

2. **Making Cones**

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14
Realize that the texture should be doughlike for cone incense. If it's too thick, it will take too long to dry. If it's too thin, the cones won't hold their shape.

15
Shape the mixture into cones on a piece of waxed paper.

16
Let your incense dry for at least five days in a warm, dry place.

3. Making Sticks

17
Add thinner mucilage to make stick incense. The mixture should be thin enough to dip, but thick enough to keep a stick dipped into it standing.

18
Dip the sticks into the mixture. It will take several dippings to get the right thickness. You'll need to let each layer dry a few minutes before adding the next one.

19
Poke the ends of the sticks into a Styrofoam block to hold them upright.

20
Let your incense dry for at least five days in a warm, dry place.

Read more: [How to Make Incense | eHow.com](http://www.ehow.com/how_7540_make-incense.html#ixzz2GULikUZ4)

Many of your questions have been addressed in the Safe Locations documentation, as a link from the page for Michigan. Our general advice is to be 50 feet above the lake level and 10 miles from shore for lake sloshing, and if you are not on rock then to add more elevation or milage for safety as soil can melt. As we mentioned when detailing changes for the Great Lakes, the area of Wisconsin and upper Michigan will be
splitting open, which is the trend in place already. Sault Saint Marie is positioned where Lake Superior drains, and this of course is where a widening split can be expected. There can also be local tearing, as we have described for Wisconsin, which will be ripped down along the Green Bay peninsula. Stretch areas have silent quakes, as these crevasses just open up with little warning, as occurred recently on the Michigan peninsula. If anything, Lake Superior will ultimately be lower, due to the locks being broken, though the torrential rains following the pole shift will create temporary flooding everywhere. The rise in sea level elevation to 675 feet will of course not affect the lands around the Great Lakes, which are at a higher elevation. Thus, except for local sloshing and the tearing that can be expected from a widening Seaway, your area will have a relatively uneventful pole shift experience.  [http://www.zetatalk.com/ning/27no2010.htm](http://www.zetatalk.com/ning/27no2010.htm)


One can see from a map of the underlying rock strata that the Seaway began forming due to a weak connection between rock strata of different formation types. This is similar to the seam in an article of clothing. Not visible necessarily from outside the garment, but a weak point and liable to rip first or most readily when the seam starts to unravel. The Seaway in essence runs along this boundary, except for Lake Erie which is south of the boundary. There is, thus, the potential for the Seaway to break through between Lake Huron and Lake Ontario, a path already forming as the geology of eastern Lake Huron shows. Such a breach would run well north of Toronto, and would create a crevasse rather than sink land, so in the scheme of things would not be that traumatic for most residents in the area. We have mentioned that Niagara Falls would widen, the Seaway finding new routes in the shattered rock, and thus the falls essentially gone.

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ZetaTalk Chat Q&A for November 27, 2010

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Nancy, I watched your video yesterday, on the 7 of 10 events, and you specifical...See More

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The locks between the Great Lakes will be shattered or broken long before the hour of the pole shift, so adjustments in lake water height will have started. The Seaway split has chosen to run through Duluth, MN and on west from there rather than through Wisconsin where the bond between the various rock stratas is of a stronger nature. The Seaway can be expected to proceed, thus, beyond Duluth, creating a crevasse again through upper Minnesota, with sympathetic rumpling of lands all the way to the Black Hills. Wisconsin has been splitting along rock strata too, creating the Green Bay peninsula at the juncture of Green Bay and the body of Wisconsin, as the peninsula has a different rock type. This split will continue and widen, creating a bay all the way to Madison and potentially through to the upper Mississippi, although this breach will certainly occur at Chicago through the canals dug under this city.

During the hour of the shift, when the entire globe is on the move, and rapidly so, water will of course pile up on the southern shores first, and will likely not slosh back onto the northern shores until after the hour of the pole shift. Residents along the shorelines should go inland to safety until a day or so has passed, to avoid being lured out onto a shoreline temporarily without water. Water may draw away from the shore, but will be roaring back again, and at above normal heights. The tearing of the Seaway will, if anything, relieve the worry, as the water in the Great Lakes affected will have a void to fill. All the locks between the Great Lakes will tear open, allowing the water at higher elevations to flow freely, but the
wider Seaway will absorb this increased flow. Our advice to all those who might be in a danger zone is to leave their homes, returning only after the danger of the pole shift is past. http://www.zetatalk.com/safe2011.pdf

The Canadian Rockies have an advantage during the coming pole shift, in that the portion of Pacific plate that will be forced under them during the shortening of the Pacific is less, overall, than the portion of plate to be thrust under further south, along the western coast of the US, for instance. Thus, only the land within 500 miles of the coast, in the Canadian Rockies, will experience subduction with consequent hot earth and the rock and roll of mountain building. Those living from 500 miles to 1,000 miles from the coast should anticipate adjustments, as subduction can release pressure by pushing flakes of land that separate from lower stratas forward. Push a wooden block against some flaky pastry, and watch the top flakes simply fly forward, separating from the pastry. This thrust can be sudden and projectile. Thus, crashing downward on those further inland, or creating crumpling land where such activity is not expected. Stay inland, and return to the coast when the trauma is done.

All of Canada fares well during the coming pole shift, and depending upon its altitude will fare better after the pole shift than before, due to the climate changes. Canada in the main is not criss-crossed with earthquake faults of active volcanoes, and thus suffers less from the direct effects of earthquakes and exploding volcanoes during the pole shift. Due to the shifting crust, most surviving Canadians will also find themselves in a warmer climate too. Canada will be positioned above the equator in a temperate zone after the pole shift, in a warmer strata than at present. Where Canada is an ally of the US government, it is not all that comfortable with the giant to the south, and will rebel against any attempts to control Canadian lands after the pole shift. However, within Canada there are many factions that will battle with each other for resources. Where the Canadian people are resourceful and used to living in a harsh land deeply frozen during the long winters, in the cities as in all industrialized countries, the populace is soft and will be unprepared for Aftertime living when food stuffs are not imported. Religious factions, racial unease, and class differences will create tensions in tight times beyond what is already experienced, and should be anticipated.

The worry Canadians should be concerned about is one that will sneak up on them, in the days leading into the pole shift and in the two years following. Much of Canada has a low altitude, and where land lies lower than 650 to 700 feet, this will be inundated within two years due to the melting ice caps of the old poles, now under the equatorial sun. Much of Canada is low lying land, as is much of Russia. When the Earth stops rotation, water slung toward the equator will drift toward the poles, creating some inland flooding in land near the poles. After the shift, when the poles rapidly melt under the equatorial sun, melted water will move toward the point of least resistance, which may often be inland if blockages occur. In any case, if one examines the sea level of land in eastern or northern Canada, one can see that the land will not be above water when the poles have completely melted. If situated in an area due to be inundated, survivors will have to repeatedly move ahead of the encroaching water, and take care they are not trapped on an island in the process!
During the hour of the shift, when the entire globe is on the move, and rapidly so, water will of course pile up on the southern shores first, and will likely not slosh back onto the northern shores until after the hour of the pole shift. Residents along the shorelines should go inland to safety until a day or so has passed, to avoid being lured out onto a shoreline temporarily without water. Water may draw away from the shore, but will be roaring back again, and at above normal heights. The tearing of the Seaway will, if anything, relieve the worry, as the water in the Great Lakes affected will have a void to fill. All the locks between the Great Lakes will tear open, allowing the water at higher elevations to flow freely, but the wider Seaway will absorb this increased flow. Our advice to all those who might be in a danger zone is to leave their homes, returning only after the danger of the pole shift is past. [http://www.zetatalk.com/safe2011.pdf](http://www.zetatalk.com/safe2011.pdf)
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Great Lakes [http://www.zetatalk.com/info/tinf038.htm](http://www.zetatalk.com/info/tinf038.htm)

The Great Lakes are deep, and contain enough water to create havoc along shorelines, but only those shorelines that are composed of lose soil. Any waves inland will soon recede, so encroachment into the bordering land will not be vast. Due to the widening of the St. Lawrence Seaway, the waters will drain more readily, lowering the Great Lakes somewhat, eventually. Salt water, where it meets fresh, shares itself to the extent the tidal water flows in and out. The Mississippi has salt marshes only along the deltas, as the water from the Mississippi is the greater factor. The flow, thus, is out, not in, except where the tide affected the marshes along the delta. Thus, in the widened Seaway, salt water will flood the Seaway until it meets the narrow mouth of the Seaway, some miles up the Seaway from where it empties today. It will not travel up in to the Great Lakes. Consider that these lakes today have a force of water, and empty, and will in future, from drainage. This will continue.

One should assume, rule of thumb, when along rivers or inland lakes:
• Take the worst case in memory, of flooding. Raise that water level up again so it has risen not once, but three times. In other words, if the worst case is a 40 foot rise, then assume a 120 foot rise. So this rule of thumb applies to river flooding, but to cover the sloshing that may occur for inland lakes, a different baseline must be taken.

• Inland lakes seldom flood their banks, or drain. Inland lakes may slosh, but are unlikely to rise to the level that rivers will, in that rivers are a temporary store for water, and inland lakes by their nature, a permanent store. But as a rule of thumb one can take their depth, divide by 5, and assume that level of water to be sloshing inland. In every case, then the surrounding land must be analyzed, as to safety.

Are there also rivers flooding nearby, so the wet lands will be soggy and unable to absorb the slosh? Is the land surrounding the lake dry and hard, so that no water will be held by the soil in mud, but all will become runoff, water on the move? Are the high spots around on rock, such that it will not melt, or is it soft soil that will become a mud-slide, and join the muddy water rather than hold the frightened who are clinging to its topside. Each area has different characteristics, and an analysis must be made accordingly. If you are 50 miles inland from one of the Great Lakes, but in any area that has soft soil so that being 100 feet high does not put you on rock, then you may find yourself part of the muddy Great Lake, being pulled back in a back-sloh. Thus, the variables are endless, and cannot be addressed by ourselves, but must be dealt with by the guidelines we lay out, by those who would survive themselves!

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_ZetaTalk™_
One can see from a map of the underlying rock strata that the Seaway began forming due to a weak connection between rock strata of different formation types. This is similar to the seam in an article of clothing. Not visible necessarily from outside the garment, but a weak point and liable to rip first or most readily when the seam starts to unravel. The Seaway in essence runs along this boundary, except for Lake Erie which is south of the boundary. There is, thus, the potential for the Seaway to break through between Lake Huron and Lake Ontario, a path already forming as the geology of eastern Lake Huron shows. Such a breach would run well north of Toronto, and would create a crevasse rather than sink land, so in the scheme of things would not be that traumatic for most residents in the area. We have mentioned that Niagara Falls would widen, the Seaway finding new routes in the shattered rock, and thus the falls essentially gone.

The locks between the Great Lakes will be shattered or broken long before the hour of the pole shift, so adjustments in lake water height will have started. The Seaway split has chosen to run through Duluth, MN and on west from there rather than through Wisconsin where the bond between the various rock stratas is of a stronger nature. The Seaway can be expected to proceed, thus, beyond Duluth, creating a crevasse again through upper Minnesota, with sympathetic rumpling of lands all the way to the Black Hills. Wisconsin has been splitting along rock strata too, creating the Green Bay peninsula at the juncture of Green Bay and the body of Wisconsin, as the peninsula has a different rock type. This split will continue and widen, creating a bay all the way to Madison and potentially through to the upper Mississippi, although this breach will certainly occur at Chicago through the canals dug under this city.
Many of your questions have been addressed in the Safe Locations documentation, as a link from the page for Michigan. Our general advice is to be 50 feet above the lake level and 10 miles from shore for lake sloshing, and if you are not on rock then to add more elevation or milage for safety as soil can melt. As we mentioned when detailing changes for the Great Lakes, the area of Wisconsin and upper Michigan will be splitting open, which is the trend in place already. Sault Saint Marie is positioned where Lake Superior drains, and this of course is where a widening split can be expected. There can also be local tearing, as we have described for Wisconsin, which will be ripped down along the Green Bay peninsula. Stretch areas have silent quakes, as these crevasses just open up with little warning, as occurred recently on the Michigan peninsula. If anything, Lake Superior will ultimately be lower, due to the locks
being broken, though the torrential rains following the pole shift will create temporary flooding everywhere. The rise in sea level elevation to 675 feet will of course not affect the lands around the Great Lakes, which are at a higher elevation. Thus, except for local sloshing and the tearing that can be expected from a widening Seaway, your area will have a relatively uneventful pole shift experience.

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Roseville lies on a line between the two Great Lakes, where St. Clair lake lies. This will split open as the Seaway splits open, at some point, but likely during the New Madrid adjustment. Tearing open creates crevasses, dropping bridges, heaving roadways, collapsing homes and buildings, exploding gas and water mains, and often lots of terrifying rumbling noises. Tearing open can occur suddenly and all at once or in stages over time, the more likely scenario. As always, those under a UFO display are receiving a telepathic message, while entranced with the display, focused on this and in wonderment. There are few competing distractions during such times, so the message gets center stage in the subconscious.

ZetaTalk™ July 16, 2011
The Seaway is ripping open but until the real drama ensues during the hour of the pole shift, there will merely be much stress on the rock, pulling apart. A hum was reported in July, 2011 in Roseville, near Lake St. Clair, which is in the same vicinity as Windsor. Hums have been reported on the border between Wisconsin and the Michigan peninsula, where a large and growing crack appeared in October, 2010. The hum has been around in many places around the globe for years, but hums are on the increase due to the Earth wobble increasing in violence and the plate movements which have begun during the 7 of 10 scenarios. That the Windsor hum occurs at a specific time of the night, between 1-3 am, is a clue that this hum is a result of stress caused by the daily wobble! Or is it the boogyman?

*ZetaTalk™ August 20, 2011*
Note also New Madrid Sequence.
Note also St. Lawrence Seaway.

http://www.zetatalk.com/info/tinf329.htm

New Madrid Sequence

Indeed, tearing of the St. Lawrence Seaway will occur during the New Madrid adjustment. Because the lurch of Mexico to the west actually intensifies the bowing of the N American continent, the Seaway tears open. This is actually various adjustments at weak points along the Seaway rather than the tearing apart into a larger inland bay that occurs during the pole shift itself. Niagara Falls will remain, but some of the inland locks will break. When the upper Mississippi region finds the land to its west slipping down and to the southwest, those parts north which were formerly firmly attached find they can spring northward, as the pressure from the bow had been inclining them to do. This allows the edge of the rip, at Duluth, MN, to tear further inland, with consequent rumpling in S Dakota and minor shifting of ground in all parts in between.

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There is general confusion about our predicted Earth changes. This is most often envisioned as happening all at once, suddenly, without warning. Where earthquakes and stretch zone accidents do seem to happen almost without warning, their approach is never that silent. The N American continent has been getting these warnings for some time, with increasing intensity. Quake swarms in the New Madrid region and west of this spot have been occurring, and are on the increase. Sinkholes and shifting roadways are occurring from Pennsylvania through Tennessee and elsewhere. The center of the bow being formed by the N American continent, the San Diego area, has an epidemic of water main breaks, and the snapping rock inland from this point has affected a mine in Utah. None of this is officially ascribed to the New Madrid adjustment that is pending, though FEMA gives evidence of their nervous preparations for the disaster they know is pending.

Will the New Madrid just suddenly rip with our predicted magnitude 9 quake? Hardly. There will be a progression of quakes in the magnitude 4-5 range all along the New Madrid fault line, which runs up to the Great Lakes and thence along the seaway. The bow will become more stressed, cracking rock inland from San Diego all the way to the Mississippi, and forcing adjustments north and south of this point too, from the Aleutian Islands to the tip of Mexico. Sinkholes and crevasses will proliferate throughout the US in her stretch zones,
in a swath that ranges from the New England states south to the tip of Florida and all points west. This is a large bow. Then quakes will increase to the point of being considered magnitude 6-7 along the long New Madrid fault line and its attendant splinters. The New Madrid adjustment will thus not sneak up on you, but will be well announced.

ZetaTalk ™ March 12, 2011

Note Great Lakes commentary.
Note Keweenawan Rift commentary.

http://www.zetatalk.com/info/tinfx333.htm

St. Lawrence Seaway

We have stated that the tearing of the Seaway during the pole shift will allow the New England area to bounce up by 450 feet. The New England area will no longer be bonded to land to the north of the Seaway so the natural floatation characteristic of the rock is allowed to express itself. How far back along the Seaway does this bounce travel, and does it affect the northern side of the Seaway? As is known, the rock strata north of the Seaway is a different composition than that to the south of the Seaway. The ripping of the Seaway has occurred along this boundary because differing rock strata do not bond tightly. Where this is the general description, the pulling apart of the Seaway is not exactly along the rock strata boundaries, and thus a portion of the lighter rock to the south of the Seaway is found along its northern edge, and this portion includes Montreal.

Where the Seaway opens into Lake Ontario, it is passing through a pinch of rock that is cohesive both north and south and does not want to rip open. Thus the finger lakes in New York State, just beyond this pinch, are attempting to rip open where the pinch itself has not yet ripped. Montreal is just prior to this pinch. This pole shift, the pinch will rip, and rip deeply. This allows Montreal to be relatively unaffected by the tidal sloshing that would otherwise roar up the Seaway, as the water can drop into the deeper crevasse at the bottom of the Seaway.
However, the rock strata along the northern side of the Seaway, though cohesive with the rock strata in the New England region, will *not* experience a bounce because of the deep Seaway rip. The bounce that New England will experience stops on the southern side of the Seaway across from Montreal and should be prorated along this southern shoreline from this point to the Seaway outlet to determine the degree of bounce for any given area. Where residents of Montreal will survive the pole shift tidal sloshing, they will be forced to move during the following two years to higher ground when the sea level rises to 675 feet.

*ZetaTalk™*

Note [Great Lakes](#) commentary.
Note [New Madrid](#) commentary.
Note [Montreal](#) commentary.

**Toronto**
Toronto, Canada is situated on the edge of high drama that will occur during the Pole Shift. Those of faint heart are advised to move inland for the duration of the drama. The St. Lawrence Seaway is due to further its split during the shift, widening the Seaway to what will become an ocean bay. During the split the bordering land will not sink. The release of tension of connectedness to plates in the Atlantic will be stretched and drawn downward as the Atlantic widens, and then when the rip occurs the lands bordering the Seaway will bob up somewhat. However, the action will be heart stopping. In general, this section of Canada as all of Canada will have a good climate in the Aftertime, a temperate climate.

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We have predicted that Toronto will not suffer during the New Madrid adjustments, as will those cities and regions to the south of the Seaway and Great Lakes. This is due to the Seaway itself acting as a buffer. The Seaway splits open, with its southern shores pulling to the southwest while its northern shores remain as an anchor. Of course, the whole region will jolt, and if the New Madrid region will sustain many quakes of a magnitude 8 and even a magnitude 9, the northern shore of the Seaway will sustain quakes easily into magnitude 7. What will this mean for those cities which have not been designed with earthquakes in mind? As with the cities in the New Madrid region which are poorly prepared, it will be a catastrophe.

The world is used to seeing images from Iran and Turkey and Haiti where earthquakes of a mere magnitude 5 or 6 devastate towns, killing hundreds, and leaving rubble in its place. This is excused as poor foresight for regions prone to earthquakes, but the same can be said of cities in Europe and the US and Canada where entire cities have been constructed with no thought whatsoever to the possibility of an earthquake strike. Anything more than a single story in height can be assumed to crash down and trap those beneath. Bridges will drop, roadways heave, dams and water reservoirs break, and gas and water mains snap and spew their contents. Fires break out, rescue vehicles cannot move about, and whether this is for a magnitude 5-7 or a magnitude 8-9, the effects are the same. Cities are not safe locations!

ZetaTalk™ February 19, 2011

Note St. Lawrence Seaway commentary.
The new position of the U.S. will be at approximately the same distance from the equator as now. However, the earth plate that it now sits on, will turn around counter-clockwise about 90 degrees. This means that the western coast (which currently runs north to south) will, in the future, be positioned parallel to the equator, aligned west to east. The Sierra and Rocky Mountains will also run parallel to the equator, or west to east. After the pole shift, and once the 12th Planet has moved out of close contact with the earth, our planet will resume its rotation. I think it is reasonable to believe that it will turn in the same direction it was going before the 12th came for a visit. Also, the jet stream will be blowing from west to east, as it is now. This means, in relation to the new position of the continental U.S., the jet stream will be blowing parallel to the Sierra and Rocky Mountain chains (right now it blows perpendicular to them). Also, remember that our west coast volcanos (Mt. Lassen, Mt. Shasta, Mt. St. Helens, etc.) will be going crazy after the pole shift, and will dump a zillion tons of ash for many years on areas downwind. This ash will go up into the air and be carried eastward on the jet stream. So, the entire Washington, Oregon and California areas will not only be devastated by earth plate collision, but also by thick, dark skies and mountains of ash, as their new positions will be in direct line of the volcanoes. The volcanic ash will be blowing parallel to the Sierras and Rocky mountains, in their future west-to-east position. Will the volcanic ash affect Lake Lahontan and Lake Tahoe areas?


http://www.zetatalk.com/info/tinfx015.htm

England has traditionally fared well during pole shifts, due to its underlying rock structures. Stonehenge attests to this, sustaining a few sharp jolts but avoiding extended jiggling that is often more destructive of heavy structures. However, the Atlantic is anticipated to widen greatly during the coming pole shift, and this will affect England as well as the islands lying to the west of her. During the week of rotation stoppage, lands bordering the Atlantic, due to the stretch that will occur as the Earth continues to pull East, attempting to continue turning and resisting the stoppage, will drop. In England this will results in a permanent drop of 75 feet. England, however, will not go completely under the waves, but in addition to the stretch, wave action during the shift must be taken
into account. At first, during the Earth's rotation stoppage, the waters surrounding England may move north toward the pole. Then, during the shift, the waters will dramatically drop as the Atlantic widens. Here is where the danger lies, as within hours there will be a return of the water, with uncontrolled sloshing and the overall drop in sea level will be apparent! Stay on high ground for at least a day.

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We have stated that England, and the UK in general, can anticipate a permanent drop of 75 feet in elevation due to the pole shift. This combined with the 675 foot drop in elevation due to sea level rise within 2 years after the shift puts any land under 750 feet in today's elevation under water. The islands of the UK are not large, so our advice to seek high ground, at least 100 miles from a coastline and 200 feet above sea level, must be altered for the UK. Seek the high mountains! Given the few miles that must be traveled, during the last weeks you should be camped on high ground. Prorate the height of the tidal waves. If 500-600 feet at the coast, and 200 feet 100 miles inland, then what would 50 miles inland present? We have advised for those that would be affected by the European tsunami prior to the pole shift, where our estimate was 200-300 feet in height, that you should assume half the precaution for the pole shift tidal waves. This same advice applies. Water seeks its level, so that during sloshing there will be no coastline in the UK that is not affected.

Since the brunt of the 200-300 foot high European tsunami will hit western England, with only about 100 feet roaring through the English Channel, what will the effect be on Ireland, Scotland, and Wales? The Irish Sea can expect a strong tsunami also, an estimated 150 feet high and pushing strong. All land directly on the coastline and all land that can be inundated up river or into lowlands will be affected. We have suggested that those who anticipate being affected by the tsunami prorate our guidelines for the pole shift sloshing as a guide to where the tsunami might reach. If one must be 100 miles inland and 200 feet up for a 500-600 foot high tide, then for a 150 foot tsunami, assume one-third of this. Given the narrow islands, being 100 miles from shore is hardly possible, so one must assume being 150 feet high at a minimum, and taking into consideration tidal bore up ravines or rivers, 250 feet would be advised. Such elevation exists in Ireland, Scotland, and Wales but the major cities are in lowlands and will have scant warning before the tsunami hits. Ships at sea, giving warning of the approach, are the best bet for an early warning, and such alert ship captains should be on the lookout from the time of the great New Madrid quake, as this will occur within hours of that quake.

http://www.zetatalk.com/info/tinfx133.htm