

# Crustardes of Flessh

*A Recreation of a Pie from Forme of Cury*



Eulalia Piebakere, AoA, JdL, GdS (Laurel Grasmick-Black)

Presented at An Tir's Kingdom Arts and Science Championship AS XLIX

March 2015

Contact email: [laurelkblack@gmail.com](mailto:laurelkblack@gmail.com)

## *Table of Contents*

[Entry Overview and Project Abstract](#)

[Introduction](#)

[Source Recipe](#)

[Recipe Annotation](#)

[Recreation Methods and Materials](#)

[Explanation of Process Choices](#)

[Conclusions \(and Future Projects\)](#)

[Bibliography and Works Cited](#)

[Appendix 1: Crustardes recipes from Forme of Cury](#)

[Appendix 2: Notes on Bird Consumption in Late Medieval England](#)

[Appendix 3: 14th Century English Pie Recipes, Notes, and Analysis](#)

[Appendix 4: On Medieval Grains](#)



## Entry Overview and Project Abstract

For this entry, I have prepared a meat pie based on a late 14th century English recipe. The recipe I worked from is from *Forme of Cury*, a culinary manuscript attributed to Richard II's master cooks and believed to have been compiled around 1390. In addition to a recipe and my general recreation notes, in this document I present an annotation of the source recipe and my analysis of related recipes from within the same text. I have used archaeological evidence to supplement my recipe analyses, as this provides a more comprehensive view of available ingredients. Additionally, I have drawn upon my experience with open-fire cooking and baking when making some of my recreation decisions, which I describe where applicable.

The pie I chose to recreate is representative of trends in foods consumed by high-status individuals in England during the high medieval and late medieval periods. Building on research I did for a pie crust project presented last year, the crust was prepared using stone ground and sieved flour from heirloom rye and bread wheat grown in mixed fields in England. The filling contains three different types of birds: squab, chicken, and quail (as a stand-in for passerine songbirds, which are largely illegal to kill in the US), as well as eggs, currants, and spices. The consumption of birds was a sign of wealth during this time period, so it is fitting that a royal pie contain multiple types of desirable (and expensive) birds. The other filling ingredients would have been imported to England, adding considerably to their cost. This is also a very labor intensive food; multiple steps and some specialized techniques are required to produce this pie, which is a further indication of the social context in which this pie would have existed.

## Introduction

Last year at the Kingdom Arts and Sciences Championship, I presented an experimental project on self-supporting pie crusts in late thirteenth through late fourteenth century England, mostly focusing on high-status contexts. This current project grew out of that work: initially, I had intended to do a similarly broad survey of pie recipes. I ended up baking several different pies over the course of the year (especially last summer at An Tir / West War as part of the Cooks' Playdate), and I began to get a sense of trends in medieval English pies. One pie recipe in particular caught my attention, one that contained three different kinds of birds. I came to the realization that while a broad project scope appealed to me, there was a significant value in forcing myself to choose and focus on one particular pie recipe.

Medieval recipes are not as specific as modern ones, and so there is a lot of room for interpretation. When I first started out with medieval cooking, I would make a recipe once or twice before moving on, trusting in my own already developed cooking skills to carry me to success. With this project, however, I wanted to force myself to delve deeper, and to unpack the nuances of ingredients and process through trying different options and keeping records. I also wanted to be able to come away from the process with a single standardized recipe that I could share with others, and that would yield consistent and tasty results. What follows is my report of how I recreated this particular pie recipe and why I made this pie the way I did.

## Source Recipe

Original (as transcribed by Hieatt and Butler, see sources): 161. Crustardes of flessch. Take peiouns, chykens, and smale briddes; smyte hem in gobettes. & sethe hem all ifere in god broþ & in gres wiþ veriows. Do þerto safroun & powdur fort. Make a crust in a trap, and pynche it, & cowche þe flessch þerinne; & cast þerinne raisouns coraunce, powdour douce and salt. Breke ayren and wryng hem thurgh a cloth & swyng þe sewe of þe stewe þerwith, and helde it vppon the flessch. Couere it & bake it wel, and serue hit forth.

Translation into modern English: Crustardes of flesh. Take pigeons, chickens, and small birds; smite them in gobbets. And seeth them all fair in good broth and in grease with verjus. Do thereto saffron and powder fort. Make a crust in a trap, and pinch it, and couch the flesh therein; and cast therein currants, powder douce, and salt. Break eggs and wring them through a cloth and swing the juice of the stew therewith, and hold it upon the flesh. Cover it and bake it well, and serve it forth.

## Recipe Annotation

Medieval recipes are notorious for their deviations from what a modern cook expects to find (I have addressed this discrepancy in a later section of this document). In the process of recreating this pie, I found it extremely beneficial to do a line by line annotation of the source recipe, unpacking as many aspects of the ingredients and methods that I could. In addition to clarifying linguistic ambiguity, I also used this opportunity to gather additional research into which ingredients or methods are most likely to have been used by a medieval cook.

### *161. Crustardes of flesshe.*

There are three recipes in *Forme of Cury* in the “crustardes” family; this one (number 161) which is for a meat day, plus crustardes of fysshe (163) and crustardes of eerbis (164). The full text of these recipes is in Appendix 1. Based on the similarities between these recipes, crustardes seem to have a significant portion of liquid combined with the main ingredient in the crust, which is always baked in a trap. I suspect that the word crustardes is related to custard, which would go along with this observation, as both involve liquid and thickeners. Two of three crustardes do not appear to have a top crust, while this recipe does specify that the filling is to be covered before being baked.

All three of these recipes are also centered around expensive / high-status ingredients; the flesh version has birds, the fish versions have freshwater fish<sup>1</sup>, and the herb version contains walnuts. All three recipes are augmented with spices and imported dried fruits. Both birds and freshwater fish were specifically luxury-market items, and walnuts may have been imported rather than grown in England (which would have made them costly).

---

<sup>1</sup> Marine fish (predominantly herring and white-fleshed fish like cod) and anadromous salmon and eels were preserved (by salting or smoking), while freshwater fish were not (Serjeantson and Woolgar). The demand for freshwater fish was sufficient to warrant the construction of fishponds, primarily for the luxury market (ibid).

*Take peiouns, chykens, and smale briddes; smyte hem in gobettes.*

Chickens were domestic fowl. Across multiple archeological sites dating to the high medieval and late medieval periods, chickens were by a wide margin the most common bird remains found; at higher status sites, many of the chickens consumed appear to have been immature pullets and cockerels or laying hens (Serjeantson). While pigeons (doves/squab) could technically have been either domestic or wild, both archeological evidence (ibid) and artistic evidence in the form of images of dovecotes suggest that squab were commonly raised in royal and noble contexts. The small birds were presumably wild songbirds, such as thrushes, finches, or starlings. For more on bird consumption trends, see Appendix 2. Cutting the birds into pieces first would expedite cooking.

*& sethe hem all ifere in god broþ & in gres wiþ veriows.*

The birds are to be stewed (*sethe* -- seethe/boil/simmer) in broth along with grease and sour grape juice. Broth is a tricky thing in 14th century recipes. I haven't found an English recipe for the broth itself, and I suspect that it was actually a byproduct of other foods being produced. I also have not found good linguistic evidence that there was a distinction made between broth and stock. Everything I see of medieval kitchen management, even in high-status contexts, suggests economy and reuse. Boiled beef (especially salt beef) was a staple food for servants and commoners; while the cooks responsible for preparing this pie were cooking for the king, those same kitchens were responsible for feeding the other members of the royal household. Thus it seems reasonable to me to suppose that these cooks had a ready supply of beef-infused liquid, possibly with salt. To recreate this I tend to use homemade beef broth (or stock) with salt but without other spices. Since I cannot know for certain if herbs or spices were included in medieval broth, I choose to leave them out to make my recipes more consistent.

I believe the other ingredients that the birds are cooked with each have a specific purpose for inclusion. The birds being used by a medieval cook, even if they were from

domestic stock, would have been substantially leaner than modern poultry. Adding grease, therefore, would have improved the flavor and texture of the meat. Verjus is the juice of unripe grapes; in addition to being pleasantly tart, its acidity would help to tenderize the meat during cooking.

*Do þerto safroun & powdur fort.*

It's unclear if these are cooked with the birds or added after cooking. I have tried both and prefer adding the spices during the latter part of cooking; this could be the intention of the recipe writer as well as this step comes after seething the birds but before assembling the pie. Powder fort is a "strong" spice mix that may have been purchased pre-mixed or may have been prepared by the kitchen staff. I have never found evidence that powder fort was a consistent mix; I believe it is more likely that individual merchants and cooks had individual blends. In analyzing the spices described in the other recipes in *Forme of Cury*, I found one possibility in recipe number 16 for powder fort's ingredients: "...and lat it seeth togydre with powdour fort: of gynger oþer of canell and macys..."

Although some continental culinary manuscripts and later English cookbooks give more detailed information about spice blends, I have not found specific recipes or even standard ingredients for powder fort in the 14th century English corpus. Other "strong" spices mentioned in *Forme of Cury* that might be part of powder fort are black pepper, cubeb, long pepper, grains of paradise, cloves, possibly galangal, and cassia cinnamon. Making powder fort for use in recreating 14th century English cuisine is inherently speculative; the spices I chose (see next section) could be debated.

*Make a crust in a trap, and pynche it,*

I wanted to confirm why this is meant to be in a trap, so I tested this as a free-standing coffin. It failed miserably: the filling has too much liquid, and it falls apart. "Pynche it" could mean a variety of things; usually we "pinch" a crust when it's all done and the top crust is on, and not necessarily before. I tried one test run of this pie where I



pinched the top edge of the bottom crust before putting the top on it and it did not improve the process or the product.

*& cowche þe flessch þerinne; & cast þerinne raisouns coraunce, powdour douce and salt.*

I choose to interpret this that one separates the bones out of the flesh first. The meat is then put into the crust, with currants, salt, and spices to be added. Similar to powder fort, powder douce was a prepared spice mixture that may not have been standardized by this time period. Powder douce, however, is a sweet spice mix. Based on the spices listed in *Forme of Cury*, the most likely to be part of powder douce are ginger, cinnamon, nutmeg, and potentially sugar (which may be the source of the name). One recipe from *Forme of Cury* makes a note to add to a pie: “a litel sugur with powdour douce” -- this may imply that powder douce did not typically (or always?) contain sugar, but this is not certain. Again, recreating powder douce is speculative. My chosen spices in this recreation (see next section) should not be taken as definitive, they represent my best guess and personal taste preferences.

*Breke ayren and wryng hem thurgh a cloth*

I had fun experimenting with wringing eggs through a cloth. I used modern cheesecloth; based on how cloths seem to have been used by medieval cooks, it's reasonable to infer that they had a relatively open-weave linen to work with. Squeezing the eggs through the cloth removed the chalazae, which would yield a more smooth finished product (especially with fresh eggs, which have more noticeable chalazae). It's also possible that this step controlled for fertilized eggs of slightly varying ages.

*& swyng þe sewe of þe stewe þerwith,*

The liquid from cooking the birds is now mixed (presumably beaten) with the eggs. It helps to cool the liquid first to avoid curdling the egg. Because I think this recipe's name is very likely related to “custard,” I take that as evidence that the eggs and liquid are meant to be a rather significant part of the finished pie. In my early experiments, I was cautious

and only used a small amount of liquid and egg. These pies turned out unpleasantly dry. A later experiment had a better ratio, but I filled the crust much too full and it overflowed, burning around the outside of the crust and pan. This was the same set of experiments wherein I discovered that this pie will *not* work in a self-supporting coffin; the amount of liquid needed to make the filling the most palatable is too much for a coffin to support.

*and helde it vppon the flessch.*

While “helde” may have some additional significance that is not obvious, I poured the liquid over the meat (with currants and spices) in the crusts. I found it helpful to spread the meat fairly evenly in the bottom crust first so that the egg mixture fills in the spaces, much as one might do with a quiche.

*Couere it & bake it wel,*

It’s possible that “couere” means to put an actual lid over the pie plate, or a cloche, but I haven’t seen direct evidence of either in this time period. It is simplest to interpret this as a top crust, especially since most recipes do not mention a top crust, implying that adding one may have not been the norm (and thus the writer had to clarify this step).

Medieval ovens were significantly different from modern ovens. They were wood-fired and made of earth or brick. Wood-fired ovens can either have fire/coins continuously in them alongside the food, or a large fire can be built, allowed to die down, and the coins raked out before adding the food. I have had some experience baking in wood-fired ovens, although not in strict replicas of medieval ovens. In cases where the oven is heated solely by an initial fire, it works best to bake bread first (when the oven is hottest) and then to bake pies second; bread needs those initial high temperatures much more than pies do. While I cannot be certain at what temperature medieval pies were baked, I have found through my pie experiments while camping (using wood-fired ovens, modern cast iron Dutch ovens, and ceramic cloches) that pie is fairly forgiving. While 350-400°F seems to generally produce the best results, I have made pies that were baked at lower temperatures over a very long period of time.

In fact, provided that any meat used in the filling is pre-cooked, it is very, very hard to bake a pie that is truly inedible unless you char it to a cinder. After my adventures last summer with an extremely uncooperative wood-fired oven, I have come to appreciate that many meat pie recipes from medieval English texts do indeed call for the meat to be braised or stewed first, which makes producing a better finished product with the inherent inconsistency of a wood-fired oven a bit easier. Additionally, I have not come across any textual evidence that medieval cooks blind-baked their crusts, and the written record would actually seem to suggest that fillings, and not the crusts, were pre-cooked. Before temperature-controlled ovens, taking crusts in and out of an oven would cause significant temperature fluctuations, and would not have provided enough of a benefit to outweigh this cost.

*and serue hit forth.*

This pie is to be served relatively soon after baking. While the idea that pies were a longer-keeping food in period is generally reasonable, there's no evidence that storage of prepared food (as opposed to ingredients) was a significant concern in the royal household. Food prepared for the king, in particular, was probably not intended to be kept long (if at all); this recipe is certainly not the only one ending with an exhortation to serve it forth. We cannot be certain that this meant the pie was to be served immediately; based on my experiences with open-fire cooking, one of the advantages of pies is that they can be baked while other dishes are preparing and that they do not suffer from sitting out if they are ready before dinner time.

## Recreation Methods and Materials

I wish to preface this section by saying that there are no absolutes in recreating medieval food. The process and product are inherently a synthesis of multiple strands of research with one's own interpretations and tastes. Additionally, I do not think the evidence we have suggests that medieval food was perfectly consistent -- a crustarde of fleshh may well have varied slightly each time it was prepared. The modernized recipe I give here is not meant to be *the* single standard of recreating this pie. Over these past months, I have carried out multiple tests of different ways to prepare this pie, and this method was the end result of that testing process; this recipe was the one that I liked best and felt was most consistently successful. The quantities are scaled to my particular pie plate, which is smaller than a standard modern pie dish.

Overview of process:

1. Prepare beef broth.
2. Cook chicken and birds.
3. De-bone the meat and mix with other filling ingredients.
4. Prepare pastry, roll out bottom crust and line baking dish, place meat mixture within.
5. Mix eggs with the cooking liquid from the birds. Pour over meat mixture.
6. Roll out top crust, place over filling. Seal and crimp edges. Cut a vent in the top.
7. Bake. Allow to cool at least slightly before serving.

Beef broth:

- 1 lb oxtail
- 3 pints water
- Optional: 1 tsp salt or to taste

1. Roast oxtail pieces in a single layer at 425°F for 30 minutes, until browned.
2. Place oxtail in a slow cooker<sup>2</sup>, sprinkle with salt, and cover with water.
3. Cook on low for approximately 12 hours (or overnight).

This is only one possible version of beef broth (or stock) for use in medieval English recipes. I found that the natural gelatin present in this version improved the texture of my pies. Additionally, it produces grease which can be used to augment the birds as they cook.

#### Cooking the Birds:

- One poussin / young chicken (approximately 17 ounces by weight, raw and with bones)
- One squab (approximately 16 ounces by weight, raw and with bones)
- Three quail (each approximately 4 ounces by weight, raw and partially deboned)
- 1 ½ cups of beef broth
- 2 tablespoons grease (from the broth, or substitute lard or drippings)
- ¼ cup verjus
- ½ gram saffron
- 1 gram each ground mace, pepper, and cinnamon

1. Cut the birds into pieces:
  - a. For the quail, since they were mostly deboned I simply quartered them.
  - b. For the poussin and the squab, I removed the backs and wing tips, then removed and jointed the wings and legs. I then removed the breast meat from the bones to simplify the later processing.
  - c. Discard backs, wing tips, and excess bones.
2. Arrange the bird pieces in a slow cooker or a sturdy pot with a lid.

---

<sup>2</sup> While this is obviously a modern appliance, I have found that it is a rather good stand-in for the generally slower process of open-fire cooking using replica medieval pottery.

3. Add the grease, verjus, and spices.
4. Simmer until meat is tender.
  - a. On a stovetop, this took approximately 1 and ½ hours on moderate heat; in a slow cooker, 6 hours on low. When I stewed squab in a pipkin over a fire last summer, it took an afternoon. Times will vary with stove or slow cooker types and the size and age of the birds.
5. Remove from heat and allow to cool.

Preparing the meat for the filling:

1. Once the cooked meat has cooled, use a slotted spoon to remove the pieces from the cooking liquid.
2. Strain and reserve the cooking liquid.
3. Carefully remove and discard all bones from meat.
  - a. This is a rather arduous process as both the pigeon and quail have very small bones that are easy to overlook<sup>3</sup>; it helps to feel each piece of meat carefully, work only a small amount at once, and maintain a separate bowl for the finished (deboned) pieces.
  - b. I also removed ligaments, skin, and any pieces with inconsistent or unpleasant textures.
4. Mix and lightly shred meat as you work.

After cooking and deboning, the total mass of bird meat that this recipe yielded was 12 ½ ounces, and the total volume of cooking liquid (after straining) was 2 ½ cups.

---

<sup>3</sup> I cannot be certain that medieval cooks would have removed bones from the songbirds; some medieval pie recipes call for small birds to be “implanted” in a pie filling, presumably whole, and would seem to suggest that, as is sometimes practiced today, the bones would have simply been eaten. However the archaeological evidence for songbird bones in food waste deposits (see appendix 2) would seem to suggest that songbirds’ bones were at least sometimes removed and discarded.



## Crust:

- 7 oz flour
- 1 oz lard
- ½ cup (8 oz) water -- much of this will boil off

1. Place the flour in a heat-safe bowl, making a well in it.
2. Heat the water and lard together until the lard is fully melted and the water has barely begun to bubble.
3. Pour the heated water and lard into the well in the flour and stir vigorously.
4. Knead the dough until smooth and elastic.
5. Separate the dough into two pieces, one roughly twice the size of the other. Roll out both portions of pastry on a lightly floured surface to between ⅛ and ¼ inch thick.
6. Use the larger piece of pastry as a bottom crust, lining the pie dish (trap); set aside the smaller piece for a top crust.

Note: This recipe works better when the dough is kept warm.

## Process Photos:



Two pieces of dough; bottom crust on the left, top on the right.



The bottom crust rolled out.

Filling, Finishing, and Baking the Pie:

- 3 ounces mixed chicken, squab, and quail meat
- 2 tablespoons currants
- $\frac{1}{4}$  tsp sugar
- $\frac{3}{4}$  tsp ginger
- $\frac{1}{2}$  tsp cinnamon
- scant  $\frac{1}{2}$  tsp salt
- $\frac{1}{2}$  cup reserved liquid from cooking birds
- 2 eggs

1. Mix meat with currants and spices and place in pastry-lined pie dish. Arrange as a single loose layer.

2. Place a double layer of cheesecloth over the top of a bowl or glass measuring cup. Break two eggs into the cloth. Gather up the sides and squeeze the eggs through the cloth.
3. Whisk the cooking liquid into the eggs. Carefully pour ONLY as much of this liquid into the filling as will cover the meat; do not overfill the pie. I found that my pie dish would hold about  $\frac{3}{4}$  cup of the egg-broth liquid.
4. Lay the reserved piece of pastry over the filled bottom crust and seal/crimp the edges of both crusts together. To make a fluted edge, use the forefinger and thumb of one hand on the inside of the edge and the thumb of your other hand on the outside.
5. Cut a slit or make a hole in the top to allow steam to vent.
6. Baking:
  - Option 1: 350°F for 75 minutes or until crust is browned.
  - Option 2: 400°F for 20 minutes, 375°F for 20 minutes, and 350°F for 20 minutes. If need be, extend final cooking time until crust is browned.

Process Photos:



The cloth



Break egg into cloth



Gather edges





Squeeze



Resulting egg



What's left in the cloth



Cooking liquid from birds





After adding eggs



Bottom crust with meat, currants, and spices



After adding the egg and broth mixture



Rolling and sealing the edges of the crust (in reality this is a two-handed process)





Crimping the crust



And again



Before baking



After baking. You can see that some of the liquid has still seeped out around the edges.





Detail showing interior / filling.

To serve: Allow to cool completely. Cutting into the pie while it is still hot caused it to lose structural integrity. Cut into eight pieces and serve.

## Explanation of Process Choices

Given that recreational medieval cooking is so speculative, and the evidence provided by written recipes is incomplete, in making this pie in a modern kitchen I made the choices that I did based upon several strands of supplementary evidence: the cultural context of the source recipe, archaeological evidence for tools and ingredients, and my own experiences and experimental results gathered over the past several years.

Forme of Cury is believed to be a work prepared around 1390 by the master cooks of Richard II's court. However, the most complete surviving copy of the text (a parchment roll), which contains this attribution, actually dates to the first quarter of the 15th century. This roll, and other related texts, are believed to be copies that ultimately derive from a single original text by way of several intermediate copies. All of these extant copies contain slight differences from copying errors or formatting choices. (Hieatt and Butler) Of the eight partial or complete manuscripts of the Forme of Cury, seven contain the crustardes of flesshe recipe. Although beyond the scope of this project, future research could repeat the work done by Hieatt and Butler by comparing each of manuscripts' versions of this particular recipe to verify the modernly accepted text.

Although the text as it has come to us today is a copy, the attribution of the original, at least, is generally accepted. This would mean that the recipes in Forme of Cury represent the food eaten by the most elite stratum of medieval English society. The recipe itself supports placing the text within a high-status context. As described above, the crustardes family of recipes is united by a use of expensive ingredients, and this recipe is no exception with its multiple bird species and imported spices. Additionally, preparing the filling for this pie is a complex multi-step process requiring some sophisticated culinary knowledge and specialized skills. This was a food that could have only been made by a professional cook with a trained staff, and a well-stocked kitchen.

While modern recreationists (myself included) use medieval recipes as a basis for preparing medieval foods, I do not know that in general their authors really intended them for this use. Hieatt and Butler describe a phenomenal variance, and some obvious errors



and omissions, in the copies of the *Forme of Cury*. The text as it has been passed to us, then, is not an immediately usable instructional manual. However, the preamble to the *Forme of Cury* (which we accept to be a copy of that which originally accompanied the work, and not a later addition) does state that

the recipes are intended to teach a cook to make everyday dishes ('Common pottages and common meats for the household, as they should be made, craftily and wholesomely'), as well as unusually spiced and spectacular dishes for banquets ('curious potages and meetes and sotiltees for alle maner of States bothe hye and lowe.') (British Library)

This would tend to suggest that this work, at least, was intended to be instructional. I presume that the intended audience of this text was someone with a close connection to the court, which keeps this firmly rooted in the aristocratic world.

Knowing that this recipe comes from a royal context significantly influenced my recreation choices. There was a significant difference between foods available to people in high- and low-status contexts, or between rural and urban environments, and even between different regions of England. Richard II's court was located in London, so wherever possible I have tried to look for evidence of foodstuffs available specifically in London and in high-status contexts. What I was able to uncover influenced my choice of ingredients, in particular.

I prepared the crust for this pie following what I learned from a single entry that I presented at last year's Kingdom Arts and Sciences championship. The evidence I analyzed last year suggested that generic or all-purpose pastry made in a high-status kitchen was most likely made by heating water with fat and combining with sifted rye and bread wheat flour mixed. I did not find evidence that pastry for pies baked in a trap was significantly different from that of pies baked in coffins; this was something that I had wondered about when doing my crust research last year. Based on my experiments and recipe analysis this year, I tend to think that there are other factors at play (mostly having to do with the amount of liquid in the filling).

For those who read my research or attended my presentation last year, one of my significant areas of frustration was being unable to find a reasonable substitute for historical wheat flour. I did a rather extensive study of available evidence about medieval

cereal varieties, which I have summarized in appendix 4. My overall conclusion was that the wheat flour used by high-status bakers in high medieval (and late medieval) England would have been stone ground and then sieved to remove the bran and yield a “white” flour that is distinct from modern processed and bleached white flour. Furthermore, this flour would have been produced from a mix multiple strains of two wheat species, *T. aestivum* and *T. turgidum*, or bread wheat and rivet wheat, which would have been grown together in what is often called a “landrace” crop.

I am happy to report that my frustration of last year has yielded to excitement: I have found a modern producer of what is essentially a recreation of such flour. John Letts runs a small specialty farming and milling operation called Lammas Fayre that grows mixed crops of heirloom rivet and bread wheat varieties, then stone grinds and (when appropriate) sieves flour from them. While Lammas Fayre offers several different varieties of flour, the one that is best suited to recreating 14th century English pie crusts is one which they bill as an Elizabethan “manchet” (white bread) blend. From the company’s description of this product:

"Lammas Fayre's manchet flour is milled from a blend of heritage bread (*Triticum aestivum*) and rivet wheat (*Triticum turgidum*) varieties that were grown in the Elizabethan period for making fine white 'manchet' bread for special occasions and the high table. Our manchet flour is grown organically at Collings Hanger Farm in the village of Prestwood in Buckinghamshire, and at Sheepdrove Organic Farm in Wiltshire. The grain is polished, stoneground and sieved to produce a creamy white flour with a unique texture and flavour that is ideal for all baked goods, including pastries and artisan-style bread."

For the modern medieval cook, finding this flour is a phenomenal leap forward in terms of historical authenticity compared to readily available wheat flours. I had previously used a mix of unbleached stone ground all purpose white flour and stone ground whole grain pastry (soft white wheat) flour in my medieval baking experiments as an attempt to replicate some of the qualities of medieval “white” flour. The Lammas Fayre flour is significantly different in texture (it was fluffier than the whole wheat pastry flour and less smooth than the modern white flour) and color (more gray than either modern flour). In terms of baking performance, I observed that the modern flour tends to yield a tougher

finished crust, which would fit with the idea that modern flour has a higher gluten content. The crusts made with the manchet blend had a very pleasant flavor and texture.

This year's most challenging search was a modern substitute for medieval chickens. The ideal chicken to use when recreating this pie would have been an immature bird (a pullet or young cockerel) from an heirloom breed that had been traditionally farmed with pasture access. However, I was not able to find such a bird in time for this competition. I tested the following types of modern-breed chickens: a typical organic chicken, a stewing hen, and a poussin (immature chicken); each has its advantages and disadvantages from an authenticity standpoint.

I personally found that the organic chicken was rather insipid, and its body size and proportions did not look anything like what I think of as a normal chicken. Modern chickens raised for their meat, typically cornish cross breeds, have been bred to be significantly breast-heavy. They also tend to have much more body fat than premodern chickens would have had. However, this chicken was a relatively young bird and did not require a significantly longer cooking time than the squab or quail.

The stewing hen, by contrast, was small, lean, and had normal chicken proportions, with less breast meat and more functional legs. It also tasted like chicken, a result of living longer than 6-8 weeks. The downside, of course, is that an older hen seems to be specifically contraindicated by archeological evidence for poultry consumption in high-status contexts (see appendix 2). This chicken required a much longer cooking time than the squab or quail; the way the recipe is written seems to imply that all the birds are cooked together, which would provide further evidence that a young chicken was used.

The option I eventually settled on (and which was used in the pies I am presenting this weekend) was a poussin. While this term can mean different things, this one was specifically labeled as an immature chicken. It was roughly the same size as the squab I used and, predictably, did not take long to cook. It was conventionally farmed and of a modern breed. It did appear to have normal chicken proportions (it was not noticeably breast-heavy), which could either be due to age or breed. It did not have a strong chicken flavor, but neither did it taste as bland and mealy as the standard organic chicken. It is also

entirely possible that more strongly flavored meats, which tend to be from older animals, were not actually desirable to the medieval cook. While pastured animals (including chickens) have a substantially more robust flavor than modern conventionally reared ones, this difference is much less noticeable in younger animals. Given that we know that the chickens used medievally were immature, this seems like the best readily available substitute for the modern home cook. That said, I am still looking for reliable sources of pasture-raised, immature chickens, especially ones from heirloom breeds.

The squab I used were commercially farmed, and fed a vegetarian and antibiotic free diet (per the supplier, Palmetto), and raised indoors. While domesticated pigeons have been subject to nearly the same level of artificial selection as purebred dogs, medieval manuscript illuminations of doves and pigeons do appear roughly similar to standard modern domesticated pigeons. Tracking down heirloom dove breeds or attempting to recreate medieval pigeon husbandry appears to be a research topic waiting for someone to take it up. As for the small birds, I am well aware that quail, although they did appear on medieval English tables, are not what the recipe's author intended. These should be thrushes or other small European passerine songbirds. However, almost without exception there is no legal way to obtain those. Quail are the tiniest farmed birds that I have been able to find, so they will have to do until I find a way to ethically (and legally) source songbirds.

I tried to source other animal products that are also at least broadly similar to what would have been available to a late 14th century cook. The lard I used in the crust was rendered from leaf lard from Tamworth pigs. This is a period pig breed, and the specific pigs this lard came from are from a small farm where they were fed a mixture of grains and table scraps. This is roughly equivalent to how medieval urban pigs were kept and fattened (see Albarella 2006 for more on medieval pig husbandry), and would make the biochemical composition of this fat more similar to medieval lard than lard from commercially-raised pigs<sup>4</sup>. The eggs that I used came from my backyard flock, which live a lifestyle that is overall similar to that of their medieval equivalent; they are fed a corn- and soy-free whole grain

---

<sup>4</sup> Not to mention what passes for "lard" at a typical grocery store: the shelf-stable stuff contains post-industrial preservatives and a significant portion of the lard itself has been artificially hydrogenated.

feed supplemented with table scraps, bugs, and grass. All my hens are post-medieval chicken breeds, so their eggs are larger than I believe medieval eggs would have been.

The currants and verjus that I used were thoroughly modern; while modern grape varieties are doubtless different from historical ones, I have not been able to uncover specific evidence about the differences or how to account for them in cooking. Additionally, these ingredients were secondary to the main components of this dish. The same was true of the spices used. I did use true cinnamon (*C. verum*), which I personally prefer to cassia, and I used a minimally processed sugar to better replicate pre-industrial sugar. I used sea salt with no additives.

The specific cooking methods I used were largely based on my experiences with open-fire cooking using replica medieval cookware. As discussed above, I find that using a slow cooker is actually a pretty good stand-in for the slow, low-temperature cooking that is typical of using a clay pot on a fire. When I cooked pigeons and chickens in a pipkin over the fire last summer, I was surprised to discover that they took many hours to cook fully. As for baking, as described earlier, a modern oven is much more consistent than a wood-fired one. I did some tests with starting the pie at a higher temperature and incrementally dropping the temperature to give some of this same sense; I found that it did not make a significant difference in the finished pie.

The baking dish I used for this project was a replica of a Tudor pie plate made by Mercy Neumark. On the subject of medieval pie plates, Brears notes that “Looking at the ceramic record, such vessels [wide shallow dishes] have been made in England from the late ninth century onwards, those of the thirteenth to early sixteenth centuries being around 7 to 19 inches in diameter. Some were probably used as dishes [i.e. plates, implying that they were very shallow], but the fact that a number had their rims pinched in the same manner as pastry suggests that they were traps for baking.” My pie plate is in this size range, is shallow, and has a ruffled edge.

Overall, a significant amount of consideration had to go into the recreation of this pie. There are obviously some areas that I feel could still be improved, and following my

conclusion I describe some of the work I would like to do as I continue to explore medieval English pies (a topic which I do not seem to have tired of yet).

## Conclusions (and Future Projects)

My normal research and recreation comfort zone is in the food of commoners. It has been an interesting exercise to me to compare this cooking and research process to my normal approach and areas of focus. I have a strong interest in the ways in which social status intersected with food historically. Food was one of the principal ways people had of performing power or displaying wealth: while peasants tilled the soil, kings ate their finest products. Through this project I feel that I have gained a deeper understanding of what the most highly desirable foods were in 14th century England, and a better ability to articulate why these foods were luxury items.

Wheat was more difficult to grow than other grains, and sifting flour is time and resource heavy. Eating white wheat flour, therefore, was only accessible to those of means. Domesticated and wild birds were a much more resource- and labor-intensive food source than other animals; commoners most likely did not have dovecotes, and were expressly forbidden from hunting wild game. Currants and spices had to be imported, at significant cost, and thus were completely out of reach for commoners. In addition to high-status ingredients, the multi-step process requiring specialized skills that is needed to make this pie is indicative of a highly trained kitchen staff, which would have only existed in noble and royal households. In short, this pie is closely tied to its cultural context, and can be used as a means of assessing the foodways of the late medieval English elite.

I had a significant level of background knowledge prior to starting this project. For example, I started from the position that medieval food tastes good. Thus I was not surprised to find that this pie, which would have been literally fit to serve a king, was quite tasty<sup>5</sup>. One significant shift in my perspective that I had as a result of this project feels like something I should also have known already: to make the best recreation of a medieval recipe, you have to make it again and again and again, making slight adjustments along the

---

<sup>5</sup> I brought one of the test versions to work one day and shared it with my coworkers. I was rather surprised that every person who tried it loved it, including one very adventurous person who normally eats a vegan diet and who thought it would be gross, but ended up asking for another piece.

way. I am interested to carry out this same process of relentless experimentation with some of the other pie recipes in the medieval English corpus. This project has led to me being significantly more focused and diligent in my cooking experiments, particularly in keeping detailed records of what I try, what works, what doesn't, and why.

As described above, I am not fully satisfied with the birds used in this pie. Much like my flour hunt last year, I know that I have used the best currently available modern substitutes, but also that there are probably better options somewhere. I am giving some serious thought to raising silver dorking chickens (the only breed that I have been able to definitively date to the medieval period) to see what they taste like, and in the meantime will continue to search for small hobby farmers with heirloom-breed flocks. I would also like to explore raising my own squab, but have not yet been able to persuade my wife that building a dovecote in our backyard is a good idea.

Legally obtaining songbirds will always be challenging. The only possibility I can think of is hunting or even trapping starlings, as they are a nuisance species and thus one of the only birds in North America not protected by the Migratory Bird Treaty Act. However, laws in my municipality prohibit most starling hunting methods I have thought of, and starlings living in a modern urban landscape do not seem like they would be good to eat. Perhaps I can recruit friends in rural areas to help me source more palatable starlings. I welcome input on alternative sources for small birds.

My most pressing interest right now is in building a wood-fired oven in my backyard. Once I have this completed, I would like to go from a casual occasional wood-fired baker to a serious and frequent one. It is a fun and challenging process, and, like other forms of fire-cooking, requires a significant attitude shift on the part of the cook. I look forward to what I will learn once I have my own semi-medieval oven to experiment with.



## Bibliography and Works Cited

Albarella, U. "Pig Husbandry and Pork Consumption in Medieval England" in *Food in Medieval England: Diet and Nutrition*. Oxford: Oxford University Press, 2006

Ambrose, Mike and Letch, Stephen. "Thatching with Long-Straw Wheat in Relation to On-Farm Conservation in England" in *European Landraces: On-Farm Conservation, Management, and Use* (eds. M. Veteläinen, Negri, V., N. Maxted). Biodiversity International, 2009. Accessed online:  
<[http://www.biodiversityinternational.org/uploads/tx\\_news/European\\_landraces\\_on-farm\\_conservation\\_management\\_and\\_use\\_1347.pdf](http://www.biodiversityinternational.org/uploads/tx_news/European_landraces_on-farm_conservation_management_and_use_1347.pdf)>

American Egg Board. "Chalazae." Incredible Edible Egg | Eggcyclopedia. 2013. Web.  
<<http://www.incredibleegg.org/egg-facts/eggcyclopedia/c/chalazae>>.

Bakery Bits. "Elizabethan Blend Manchet (White) Flour, 1.5kg." *Lammas Fayre Flour by John Letts*. Web.  
<<http://bakerybits.co.uk/bakery-ingredients/flour/lamas-fayre-flour-mill/lammas-fayre-elizabethan-blend-manchet-flour.html>>.

Brears, Peter C. D. *Cooking and Dining in Medieval England*. Blackawton, Totnes, Devon: Prospect Books, 2008.

The British Library. "The Forme of Cury - Coffins and Chastletes." *Books for Cooks -- Medieval Food*.  
<<http://www.bl.uk/learning/langlit/booksforcooks/med/coffinhome/chastletes.html>>

Early English Text Society. *Early English Meals and Manners: The Boke of Keruyng*. Original 1508, reprinted 1867. Accessed online:  
<<http://www.gutenberg.org/files/24790/24790-h/keruyng.html>>

Galen, and Owen Powell. *Galen: On the Properties of Foodstuffs: Introduction, Translation and Commentary*. Cambridge: Cambridge University Press, 2002.

Gerarde, John. *The Herball or Generall Historie of Plantes*. Text published in London in 1597. Transcription accessed online: <<http://caliban.mpiz-koeln.mpg.de/gerarde/>>

Hall, Allen. "A Brief History of Plant Foods in the City of York: What the Cesspits Tell Us" in *Feeding a City: York – Provision of Food from Roman Times to the 19<sup>th</sup> Century* (ed. Eileen White). Prospect Books, 2000.

Hamerow, Helena, Hinton, David Alban, and Crawford, Sally. *The Oxford Handbook of Anglo-Saxon Archaeology*. Oxford: Oxford University Press, 2011.

Haudry, A. et al. "Grinding up Wheat: A Massive Loss of Nucleotide Diversity Since Domestication" in *Molecular Biology and Evolution* volume 24 issue 7(2007): pp 1506–1517. Oxford University Press.

Hieatt, Constance B. and Butler, Sharon. *Curye on Inglysch: English Culinary Manuscripts of the 14. Century: (including the Forme of Cury)*. London: Oxford Univ., 1985

Hieatt, Constance B., Nutter, Terry, and Holloway, Johnna H. *Concordance of English Recipes: Thirteenth through Fifteenth Centuries*. Tempe, AZ: Arizona Center for Medieval and Renaissance Studies, 2006. Print.

Hieatt, Constance B. and Jones, Robin F. "Two Anglo-Norman Culinary Collections Edited from British Library Manuscripts Additional 32085 and Royal 12.C.xii" in *Speculum* Vol. 61, No. 4 (Oct., 1986), pp. 859-882

Letts, John. "Living under a medieval field" in *British Archeology* issue 58 (April 2001).  
Accessed online: <<http://www.archaeologyuk.org/ba/ba58/feat1.shtml>>

Mershman, Francis. "Ember Days." *The Catholic Encyclopedia*. Vol. 5. New York: Robert Appleton Company, 1909. 4 Feb. 2015  
<<http://www.newadvent.org/cathen/05399b.htm>>.

Moffet, L. "The Archeology of Medieval Plant Foods" in *Food in Medieval England: Diet and Nutrition*. Oxford: Oxford University Press, 2006

Palmetto Farms USA. "Squab, the Epicurean delight of Palmetto Farms USA."  
<<http://www.palmettopigeonplant.com/squab.html>>

Peleg, Zvi et al. "Genetic analysis of wheat domestication and evolution under domestication" in *Journal of Experimental Botany* volume 62 number 14 (2011), pp. 5051-5061.

Serjeantson, D. "Birds: Food and a Mark of Status" in *Food in Medieval England: Diet and Nutrition*. Oxford: Oxford University Press, 2006

D.J. Stone "The Consumption and Supply of Birds in Late Medieval England" in *Food in Medieval England: Diet and Nutrition*. Oxford: Oxford University Press, 2006

Sykes, N.J. "From Cu and Sceap to Beffe and Motton: The Management, Distribution, and Consumption of Cattle and Sheep in Medieval England" in *Food in Medieval England: Diet and Nutrition*. Oxford: Oxford University Press, 2006

US Department of Agriculture. "NDL/FNIC Food Composition Database Home Page."  
Modified December 7, 2011. Accessed January 2014. <<http://ndb.nal.usda.gov/>>

Woolgar, C.M. "Meat and Dairy Products in Late Medieval England" in *Food in Medieval England: Diet and Nutrition*. Oxford: Oxford University Press, 2006

## Appendix 1: Crustardes recipes from Forme of Cury

**161. Crustardes of flessch.** *Take peiouns, chykens, and smale briddes; smyte hem in gobettes. & sethe hem all ifere in god broþ & in gres wiþ veriows. Do þerto safroun & powdur fort. Make a crust in a trap, and pynche it, & cowche þe flessch þerinne; & cast þerinne raisouns coraunce, powdour douce and salt. Breke ayren and wryng hem thurgh a cloth & swyng þe sewe of þe stewe þerwith, and helde it vppon the flessch. Couere it & bake it wel, and serue hit forth.*

Translation: Take pigeons, chickens, and small birds; smite them in gobbets. And seeth them all fair in good broth and in grease with verjus. Do thereto saffron and powder fort. Make a crust in a trap, and pinch it, and couch the flesh therein; and cast therein currants, powder douce, and salt. Break eggs and wring them through a cloth and swing the juice of the stew therewith, and hold it upon the flesh. Cover it and bake it well, and serve it forth.

This is a pie containing three (or more) types of birds which is to be prepared in a crust in a trap. The directions specify to “cover” it, which I take to mean that a top crust is used. This includes both powder douce and powder fort. The birds are stewed in broth prior to baking, and the liquid from cooking is combined with eggs before being added back to the meat and baked.

**163. Crustardes of fysshe.** *Take loches, laumprouns, and eelis; smyte hem on pecys, and stewe hem wiþ almaund mylke and verious. Frye the loches in oile. Make a foyle and lay þe fissh þerinne; cast þeron powdour fort, powdour douce, with raysouns courance & prunes damysyn. Take galyntyn and þe sewe þerinne and swyng it togyder, and cast in the trape, and bake it and serue it forth.*

Translation: Take loaches, lampreys, and eels; smite them on pieces, and stew them with almond milk and verjus. Fry the loaches in oil. Make a foil/leaf and lay the fish therein; cast thereon powder fort, powder douce, with currants and damson prunes. Take galentine and the stew therein and mix it together, and cast in the trap, and bake it and serve it forth.

A fish pie baked in a “foil” -- which then seems to transform into a “trap.” Linguistically, I don’t actually think it’s clear if this is in a coffin or a dish. It’s also not clear if there is or is not a top crust. However, I think the best interpretation of these steps is that the fish is lain in a pastry that is in a dish, then the liquid from cooking the fish and some galentine sauce is poured over the fish; this is then baked without a top crust.

Similarities to Crustardes of Flessh: The fish is stewed in liquid, and the liquid is added back for baking. Contain similar spices and both have dried fruit.

*164. Crustardes of eerbis on fyssh day. Take gode eerbys and grynde hem smale with wallenotes pyked clene, a grete porcioun. Lye it vp almost wip as much verious as water; seep it wel with powdour and safroun without salt. Make a crust in a trap and do þe fyssh þerinne, vnstewed, wip a litel oil & gode powdour. Whan it is halfybake, do þe sewe þerto & bake it vp. If þou wilt make it clere of fyssh, seep ayren harde & take out þe 3olkes & grinde hem with gode powdours, and alye it vp with þo sewe and serue it forth.*

Translation: Take good herbs and grind them small with walnuts picked clean, a great portion. Mix it up almost with as much verjus as water; seeth it well with powdered spices and saffron without salt. Make a crust in a trap and do the fish therein, unstewed, with a little oil and good powder. When it is half baked, do the sauce thereto and bake it up. If thou will make it clear of fish, seeth eggs hard and take out the yolks and grind them with good powdered spices, and mix it up with the sauce and serve it forth.

An herb, nut, and egg or fish tart prepared in a trap. This must not have a top crust as additional ingredients are to be added partway through baking.

Similarities to Crustardes of Flessh: Herbs and walnuts are seethed with spices and saffron in verjuice and water. This sauce/liquid is also put into the crust to be baked, either with fish or with egg yolks. The crust is to be done in a trap.

## Appendix 2: Notes on Bird Consumption in Late Medieval England

While domestic chickens and geese were consumed across social classes, eating other birds was a sign of an individual's social standing. Based on a combination of archeological and written evidence, we have a fairly good view of patterns in bird consumption within and across social classes and time periods. Overall, bird consumption increased in the later medieval period, and both more individual animals and more taxa were consumed by wealthier individuals.

A wide variety of bird taxa were eaten. Based on archaeological and written records, the following domestic and wild birds were available to medieval English cooks (names given are English common names): chickens, geese, ducks (both wild and domesticated), pigeons, peafowl, pheasant, guinea fowl, swan, plover, partridge, snipe, woodcock, thrush and other *Turdus* species, curlew, gull, crane, cormorant, heron, coot, lapwing, godwit, ruff, divers, grebe, shearwater, gannet, shag, bittern, stork, spoonbill, quail, water rail, bustard, moorhen, oystercatcher, dunlin, sandpiper, whimbrel, tern, guillemot, razorbill, puffin, finch, bunting, lark, sparrow, egret, and swallow<sup>6</sup>.

There are some sampling and retrieval problems with the archeological record; in addition to general problems of identification, small birds pose a particular challenge as their bones typically require fine sieving to consistently recover. In one site, small birds made up 38% of all recovered bones when finely sieved but only 9% of bones when more typical sieving was used; thus physical evidence may under-represent the consumption of tiny birds.

Chickens were the most commonly identified species in the late medieval archaeological record, although the rate of wild bird consumption increased during this time relative to chickens and geese (there is little to no evidence of widespread duck husbandry during the high medieval or late medieval periods). Among adult chicken bones

---

<sup>6</sup> I was surprised that starlings were not mentioned in these sources. I know I have seen at least one reference to starling consumption but cannot now find the citation. I personally believe that starlings were consumed in medieval England and may undertake additional research on this point.

found, most were from hens; immature chickens were more commonly found at high-status sites, suggesting that access to younger and more tender animals was correlated with wealth. Egg production was at least as important as meat. The quantity of pigeon bones that are definitively food remains is relatively low, although there is ample archaeological evidence for dovecotes and written record of pigeon consumption; reasons for this are unclear.

Wild birds were eaten and sometimes managed or kept in captivity, and overall the rate of wild bird consumption rose in the later Middle Ages. Partridges were a popular species, as were thrushes. Quail bones were found infrequently. The term “small birds” was a catch-all for passerine songbirds. Material from one late medieval assemblage was sieved with a very fine mesh, and in this sample over 50% of all recovered bird remains were from small passerines. Species identified in these remains were lark, pipit, tit, bunting, sparrow, linnet, and finches. The “small birds” in medieval recipes were most likely to be *Turdus* and *Fringillidae* species.

Written evidence can round out our knowledge of bird consumption in the later Middle Ages. Bird consumption overall rose dramatically in the late 14th and early 15th centuries. Both capons and pigeons in particular became more popular in the aristocratic diet after the Black Death. Records from several early 15th century households indicate that each ate more than 100 pigeons per month; why this is not better reflected in the archeological record is very curious. Rare or unusual birds were given as gifts and eaten on special occasions.

There appear to have been strong seasonal patterns to bird consumption as well: no birds or eggs were consumed during Lent (late February or early March through April); pigeons were eaten from late April to mid-November with a break during early July; geese were eaten between November and February and a few immature geese were eaten in July; capons and chickens were available throughout the year; these sources did not directly address the seasonal availability of immature chickens, although I think there may have been a connection between Lenten dietary practices and the time when chickens were brooding. My experience with my modern hens is that they will only go broody during the



spring; this could be an interesting area for future research. Taking this seasonal evidence into account, crustardes of flessh would have been most likely been eaten between late April and early November, during the pigeon “season.” This would also overlap with when I would expect immature chickens to be available (summer) and when unimproved chicken breeds without modern interventions are laying regularly.

#### Works Cited:

D. Serjeantson “Birds: Food and Mark of Status” and D.J. Stone “The Consumption and Supply of Birds in Late Medieval England”, both in Woolgar et al (see sources for full citation)

## Appendix 3: 14th Century English Pie Recipes, Notes, and Analysis

A total of seven English (and Anglo-Norman) culinary manuscripts are readily available as published transcriptions. Five of these, all in English and all dating to the 14<sup>th</sup> century, are compiled in *Curie on Inglysch* (Hieatt and Butler) and two, both in Anglo-Norman French, are transcribed and translated in “Two Anglo-Norman Culinary Collections” (Hieatt and Jones). While a number of 15<sup>th</sup> century English culinary manuscripts exist, these seven works contain the only readily available recipes from my time period of interest (see Hieatt, Nutter, and Halloway)<sup>7</sup>. I started this research with an analysis on all of these manuscripts, as well as some extant 14<sup>th</sup> century feast menus.

*Curie on Inglysch* (ibid) also lists several extant 14<sup>th</sup> century feast menus, all of which feature pies (and pie-like dishes). Within each menu, the percentage of listed foods that are pie-like ranges from 5-25% which suggests that pies were a regular feature at feasts in elite contexts. Recipes for many of these pies appear in the culinary manuscripts collected in this book, as well, suggesting that they were typical or well known during this time period. Here is a list of the pies listed in these feast menus:

*grete tartes, grete crostude, domedes in paste, quynsys in past, sartes (possibly a transcription error for tartes), a mete called payne pufe, cheuettes, tartes bosewes [bosewes may be an alternate spelling of a different meat dish], flampoyntes, daryol/dariol [appearing in both flesh day and fish day menus], lechefres, dariol of crem & of refles togedere [might be two separate dishes, with the “of” a scribal error; refles could then = “raphioles” which is a pie of caul meatballs], flampoyntes of crem, tartes [on both fish day and flesh day menus], flampoyntes, lechefres of frut, crustede, dariol of almaund, torte, raphiol ibake, malaches of pork*

---

<sup>7</sup> Recently a 12<sup>th</sup> century culinary manuscript was found and published. I have yet to analyze these earlier recipes and look forward to seeing how they fit within the development of medieval English cuisine.

Looking at the recipes within the culinary manuscripts collected in *Curye on Inglysch* (all from the 14<sup>th</sup> century) shows a similar trend. Counting all recipes for foods that are enclosed in pastry and baked, including pies, tartes, chewettes, etc. one can assess the relative percentage of these recipes within each manuscript. For this analysis, I have *not* included recipes for foods enclosed in dough and boiled or fried, although I believe that pasta and pastry may not have been well differentiated at this time. The table below lists the total quantity and numbers within each manuscript:

<b>Manuscript</b>	<b>Total Recipes</b>	<b>Pie-like Recipes</b>	<b>% Pie Recipes</b>
Diuersa Cibaria	63	3 (21, 27, 43)	4.8
Diuersa Seruicia	92	3 (82, 84, 86)	3.3
Utilis Coquinario	37	1 (24)	2.7
Forme of Cury	205	24 (51, 116, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 172, 173, 174, 175, 176, 177, 178, 179, 191, 192, 197, 203)	11.7
Goud Kokery	<i>Includes no pie-like recipes</i>		

I also examined two other culinary manuscripts produced in England during this time period (one from the very end of the 13<sup>th</sup> century and the other from the early 14<sup>th</sup> century) which are transcribed and translated in *Two Anglo-Norman Culinary Collections* (see sources); the percentage of recipes in each of these was within the same range as the manuscripts listed above, as detailed in the table below:

Manuscript	Total Recipes	Pie-like Recipes	% Pie Recipes
MS A	29	2 (11, 23)	6.9%
MS B	32	2 (21, 27)	9.3%

Between all of these sources, I found a total of 40 recipes for pies, tarts, and related foods. These include sweet and savory pies and tarts of incredible variety. All of the pie, tart, etc. recipes found in culinary manuscripts produced in England during the 14th century and written in English, as well as my modern translation of and notes on each, are reprinted below. I have split these into the manuscript names given by Hieatt and Butler, and included a summary of the main ingredients and pastry enclosure method (my main area of interest) as I had originally been hoping to find a consistent pattern relating filling type to crust method. All transcriptions are from *Curye on Inglysch*, errata are my own.

#### Diuersa Cibaria: 21, 27, 43

*21: Pynite. Wyn, sucre, iboilled togedere; gyngebred & hony, poudre of gynger & of clouwes; ipiht wiþ pyntes gret plentee, & schal beon adressed in coffyns of flour of chasteys: þe colour ȝolou wyþ saffroun.*

Pynite. Wine, sugar, boiled together. Gingerbread and honey, powder of ginger and of clove; inserted with pine nuts great plenty, and shall be addressed in coffins of flour of chestnuts: the color yellow with saffron.

This is a sweet pie mostly containing pine nuts, made in coffins made from chestnut flour. It does not specify if a top crust is used.

*27. Test de Turt. Foille de pastee bon sarrays, & iplaunted þrin conynges & volatils, dates ywaschen & icouced in hony, chese neowe icoruen þryn; clouwes, quibibes, sucre abouen. Soppen on legge of fassying of festigade gret plentee, þe colour of þe farsure red, ȝolou & grene.*

*pat hed schal beon blake adressed oþe manere of hier of wymmon on an blake dische, & a monnes visage abouen.*

Turk's Head. Sheet of pastry well arrayed, and implanted therein rabbits and birds, dates washed and soused in honey, cheese new carved therein; cloves, cubebs, sugar above. Then on top of this filling of pistachios/pistachio-based-confection great plenty, the color of the filling yellow and green. That head shall be black addressed with manner of hair of woman on a black dish, and a man's visage above.

This is an illusion-food or subtlety/display pie with a meat-based filling. The "foille de pastee" is to be "bon sarrays" (well arranged). This could mean in a trap or as a coffin. It would seem that this recipe is describing using the pistachios (or pistachio confection) to create the image of the Turk's head.

*43. To make pilke mete on zeolue day of vische þat me clepeþ teste de Turt. Nim rys itried & ways am veyre, & sopþen druen, & sopþen grind in an mortar al to poudre, & do a lute amydon wipinnen. & sopþen nim luce oþur turbet oþur eles, & boill am & sopþe tempre wip milke of alemauns & do wipinnen speces, saffron & sucre. & make a coffin of past, & sopþen let scaldeen and sopþen do away þe fulþ & make to gobouns; and sopþen nim percil & saugee & of þe broth, and mak grinden togedere, & so do saffron poudre; & sopþen do into þe ouene.*

To make this food on Yule day of fish [a fish day during Yule] that I called Turk's Head. Take rice dried and wash them fair, and then dry, and then grind in a mortar all to powder, and do a little wheat starch within. And then take luce or turbot or eels, and boil them and then temper with milk of almonds and do within spices, saffron, and sugar. And make a coffin of paste, and then let scald and then do away the filth and make to gobbets [I assume this is talking about the fish, or especially eels]; and then take parsley and sage and of the broth, and make ground together, and so do saffron powder; and then do into the oven.

This is a fish day version of number 27, with a fish-based filling. This recipe specifies that it is to be in coffins, which may support the conclusion that #27 was also to be in

coffins. This recipe does not mention making the pie appear like the “teste de Turt” (Turk’s Head) of its name. It does not specify if a top crust is used.

Diuersa Servicia: 82, 84, 86

82. For to make tartys in applis, tak gode applys & gode spycis & figys & reysons & perys, & wan þey arn wel ybrayed colour wyþ safroun wel & do yt in a cofyn, & do it forth to bake wel.

For to make tarts in apples, take good apples and good spices and figs and raisins and pears, and when they are well brayed color with saffron well and do it in a coffin, and do it forth to bake well.

This is a fruit tart and is baked in a coffin. It does not specify if a top crust is used.

*84. For to make tartys of fyssh owt of lente, make þe cowche of fat chese & gyngueuer & canel & pure creym of mylk of a kow & of helys ysoden, & grynd hem wel wyþ safroun; & mak þe cowche of canel / & of clowys & of rys & of gode spycys as oþer tartys fallyþ to be.*

For to make tarts of fish out of lent, make the layer of fat cheese and ginger and cinnamon and pure cream of milk of a cow and of seethed eels. And grind them well with saffron; and make the layer of cinnamon and of cloves and of rice and of good spices as other tarts fail to be.

Cowche = layer per glossary. This is a tart that contains eels (helys), cheese, and cream and makes absolutely no mention of the actual pastry. The “as other tarts faileth to be” specification is very interesting. Were other tarts not spiced enough? For whom?

*86. For to make flownys in lente, tak god flowr & make a god past; & tak god mylk of almandys & flowr of rys oþer of amydown & boyle hem togedre þat þey be well chariand. Wan yt is boyled þykke take yt vp & lay yt on a feyre bord so þat yt be cold, & wan þe cofyns ben makyd tak a perty & do vpon þe coffyns, and kerf hem in schiueris; & do in hem god mylk of almandys & figys & datys & kerf yt in fowre partyis, & do yt to bake & serue yt forth.*

For to make flans in lent. Take good flour and make a good paste; and then take good milk of almonds and flour of rice other of wheat starch and boil them together that they be well thickened. When it is boiled thick take it up and lay it on a fair board so that it be cold, and when the coffins been maked take a portion and do upon the coffins, and carve them in slivers (or slices); and do in them good milk of almonds and figs and dates and carve it in four parts, and do it to bake and serve it forth.

This is a lenten recipe made in coffins. The pastry is to be good and made of good flour. The filling is mostly almond milk with some dried fruit, spices, and thickener. I'm unclear to me what's being carved in four parts before it's baked, but I'm assuming the dates and figs. I suspect the coffins did not have tops, although that's not specified.

#### Utilis Coquinario: 24

*24. For to dyzte fresch laumprey. Tak & open hym atte nauele & lete hym a litel blod, & gadere þat blod in a vessel & do away þe galle and scorche hym & wasch hym wel. & mak a paste of / dow & put þe launprey þerynne with good spycery; and þan mak a laye with bred & tempre it with wyn or with vynegre & medele þe blod with al, & put galentyn þerwith al raw & a tuel aboue. & set it in þe ouene til it bake, & if it be rosted dizt hym in þe same manere but þat þou sethe þe galentyn with oynounes. & if þe laumprey be salt, wasche hym in hoot water & in whete bran, & after þat do hym in hot water al a nyzt & a morwe scorche hym & seth hym with oynounes rizt wel, & mak þe galentyn be hymself; for why, he schal be serued cold and þe galentyn hot kendlich.*

For to prepare fresh lamprey. Take and open him at the navel and let him bleed a little, and gather that blood in a vessel and do away the gall and scorch him and wash him well. And make a paste of dough and put the lamprey therein with good spices; and then make a mix with bred and temper it with wine or with vinegar and meddle the blood with all, and put galentine sauce therewith all raw and a towel above. And set it in the oven until it is baked, and if it is roasted [alone and not in pastry?] prepare him in the same manner but that thou seeth the galentine with onions. And if the lamprey is salted, wash him in hot



water and in wheat bran, and after that do him in hot water all night and on the morrow scorch him and seeth him with onions right well, and make the galentine by himself, because he shall be served cold and the galentine hot kindly.

Pies of fresh lamprey. The specification to do it with a towel above is interesting, and would seem to imply that a top crust is not used and that the towel serves in its place.

Forme of Cury: 116, 158, 159, 160, 161, 162, 163, 164, 165, 166, 172, 173, 174, 175, 176, 177, 178, 179, 191, 192, 197, 203

*116. For to make flaumpeyns. Take clene pork and boile it tendre, þenne hewe it small, and bray it smal in a mortar. Take fyges and boil hem tendre in smale ale, & bray hem, & tendre chese þerwith; þenne waische hem in water & þenne bray hem all togider with ayren. Þenne take powdour of peper, or els powdour marchaunt, & ayren, and a porcioun of safroun and salt; þenne take blank sugur, eyren & flour, & make a past with a rollere. Þenne make þerof smale pelettes & fry hem broun in clene grece, & set hem asyde. Þenne make of þat ooper deel of þat past long coffyns, & do þat comade þerin, and close hem faire with a couerour, & pynche hem smale aboute. Þanne kyt aboue foure oþer sex wayes. Þanne take euery of þat kuttyng vp & þenne colour it with 3olkes of ayren, & plaunt hem thick in to þe flaumpeyns aboue þer þou kutttest hem & set hem in an ovne and lat hem bake eselich, and þanne serue hem forth.*

For to make tart points. Take clean pork and boil it tender, then hew it small, and bray it small in a mortar. Take figs and boil them tender in small ale, and bray them, and put cheese therewith; then wash them in water and bray them all together with eggs. Then take ground pepper or else ground *spice mix?* and eggs, and a portion of saffron and salt; then take white sugar, eggs, and flour, and make a paste with a roller. Then make thereof small pellets and fry them brown in clean grease, and set them aside. Then make of that other portion of that paste long coffins, and do that filling therein, and close them fair with a cover, and pinch them small about. Then cut above four or six ways. Then take every of that cutting up and then color it with yolks of eggs, and plant them thick in the tart above

there thou cuttest them and set them in an oven and let them bake easily, and serve them forth.

A pork tart with cheese, eggs, and figs that has a lot of specifications for the crust. This recipe includes a top crust which is cut open and peeled back and has fried bits of the same dough poked into the filling, presumably sticking up like points? This recipe also specifies that the coffins are to be long, and that the paste is to be done with a roller. These two pieces of evidence together might imply that the crust was rolled out and pieced together (and not shaped on a mold).

*158. Raphioles. Take swyne lyuours and seep hem wel, take brede & grate it; and take yolkes of ayren, & make hit sowple, and do þereto a lytull of lard caruoun lyche a dee, chese gratyd, & white grece, poudour douce & of gynger, & wynde it to balles as grete as apples. Take þe calle of þe swyne & cast euere by humself þerin. Make a crust in a trape, and lay þe balles þerin, & bake it; and whan þey buth ynow<sup>3</sup>, put þerin a layour of ayren with powder fort and safroun and serue it forth.*

Take swine livers and seeth them well, take bread and grate it; and take yolks of eggs, and make it supple, and do thereto a little of lard cut to dice, cheese grated, and white grease, powder douce and of ginger, and wind it to balls as great as apples. Take the caul of the swyne and cast every by himself therein. Make a crust in a trap, and lay the balls therein, and bake it; and when they be enough, put therein a layer of eggs with powder fort and saffron and serve it forth.

Pig liver is mixed with bread, egg yolks, cheese, and fat (both diced and rendered) and wrapped in caul fat. This is then baked in a crust which is in a trap and appears to not have a top crust. It is finished by being brushed with egg and spices.

*159. Malaches. Take blode of swyne, floure, & lard idysed, salt & mele; do hit togedre. Bake hyt in a trappe wyt wyte gres.*

Take blood of swine, flour, and diced lard, salt, and meal; do it together. Bake it in a trap with white grease.

I'm making a leap that the "trap" includes a crust, as the other "malaches" variants are pie-like. This is essentially a baked blood pudding.

*160. Malaches whyte. Take ayren and wryng hem thurgh a cloth. Take powdour fort, brede igrated, & safroun, & cast pereto a gode quantite of buttur with a littul salt. Meddle all yfere. Make a foil in a trap & bake it wel perinne, and serue it forth.*

Take eggs and wring them through a cloth. Take powder fort, grated bread, and saffron, and cast thereto a good quantity of butter with a little salt. Meddle it all fair. Make a foil/leaf in a trap and bake it well therein, and serve it forth.

This is an egg tart with breadcrumbs, butter, and spices.

*161. Crustardes of flessch. Take peiouns, chykens, and smale briddes; smyte hem in gobettes. & sethe hem all ifere in god brop & in gres wiþ veriows. Do þerto safroun & powdur fort. Make a crust in a trap, and pynche it, & cowche þe flessch perinne; & cast perinne raisouns coraunce, powdour douce and salt. Breke ayren and wryng hem thurgh a cloth & swyng þe sewe of þe stewe þerwith, and helde it vppon the flessch. Couere it & bake it wel, and serue hit forth.*

Take pigeons, chickens, and small birds; smite them in gobbets. And seeth them all fair in good broth and in grease with verjus. Do thereto saffron and powder fort. Make a crust in a trap, and pinch it, and couch the flesh therein; and cast therein currants, powder douce, and salt. Break eggs and wring them through a cloth and swing the juice of the stew therewith, and hold it upon the flesh. Cover it and bake it well, and serve it forth.

This is a pie containing three types of birds which is to be prepared in a crust in a trap. The directions specify to "cover" it, which I take to mean that a top crust is used. This includes both powder douce and powder fort.

*162. Malaches of pork. Hewe pork al to pecys and medle it with ayren & chese igrated. Do þerto powdour fort, safroun & pynes with salt. Make a crust in a trap; bake it wel perinne, and serue it forth.*

Hew pork all to pieces and meddle it with eggs and grated cheese. Do thereto powder fort, saffron, and pine nuts with salt. Make a crust in a trap; bake it well therein, and serve it forth.

A meat, egg, cheese, and nut pie baked in a trap.

*163. Crustardes of fysshe. Take loches, laumprouns, and eelis; smyte hem on pecys, and stewe hem wiþ almaund mylke and verious. Frye the loches in oile. Make a foyle and lay þe fissh þerinne; cast þeron powdour fort, powdour douce, with raysouns courance & prunes damysysn. Take galyntyn and þe sewe þerinne and swyng it togyder, and cast in the trape, and bake it and serue it forth.*

Take loaches, lampreys, and eels; smite them on pieces, and stew them with almond milk and verjus. Fry the loaches in oil. Make a foil/leaf and lay the fish therein; cast thereon powder fort, powder douce, with currants and damson prunes. Take galentine and the stew therein and mix it together, and cast in the trap, and bake it and serve it forth.

A fish pie baked in a “foil” -- which then seems to transform into a “trap.” Linguistically, I don’t actually think it’s clear if this is in a coffin or a dish. It’s also not clear if there is or is not a top crust.

*164. Crustardes of eerbis on fyssh day. Take gode eerbys and grynde hem smale with wallenotes pyked clene, a grete porcioun. Lye it vp almost wiþ as much verious as water; seep it wel with powdour and safroun without salt. Make a crust in a trap and do þe fyssh þerinne, vnstewed, wiþ a litel oil & gode powdour. Whan it is halfybake, do þe sewe þerto & bake it vp. If þou wilt make it clere of fyssh, seep ayren harde & take out þe zolkes & grinde hem with gode powdours, and alye it vp with þo sewe and serue it forth.*

Take good herbs and grind them small with walnuts picked clean, a great portion. Mix it up almost with as much verjus as water; seeth it well with powdered spices and saffron without salt. Make a crust in a trap and do the fish therein, unstewed, with a little oil and good powder. When it is half baked, do the sauce thereto and bake it up. If thou will

make it clear of fish, seeth eggs hard and take out the yolks and grind them with good powdered spices, and mix it up with the sauce and serve it forth.

An herb, nut, and egg or fish tart prepared in a trap. This must not have a top crust as additional ingredients are to be added partway through baking.

*165. Leche frys of fische daye. Take god chese & dyse hit; medel þerwyt 3olkes of eyren rawe. Cast þerto poudur of gynger, sugur, and salt. Make a cophyn of þe heghte of þi lyte fingur, and do þi fars þerin & bake hyt as tartes. Set þerin flowre of canel & clowes.*

Cold slices for a fish day. Take good cheese and dice it, meddle therewith yolks of eggs raw. Cast thereto powder of ginger, sugar, and salt. Make a coffin of the height of thy little finger, and do thy fars therein and bake it as tarts. Set therein ground cinnamon and cloves.

Coffins “the height of thy little finger” with filling inside, baked “as tarts.” No top crust specified (lends some credence to the idea that tarts don’t have a top). Presumably the coffins would have been suitable for a fish day.

*166. Leche frys in lentoun. Drawe a thik almaunde mylke wiþ water. Take dates and pyke hem clene with apples and peeres, & mynce hem with prunes damysyns; take out þe stones out of þe prunes, & kerue the prunes a two. Do þerto raisouns coraunce, sugur, flour of canel, hoole macys and clowes, gode powdours & salt; colour hem vp with saundres. Meng þis with oile. Make a coffyn as þou didest bifore & do þis fars þerin, & bake it wel, and serue it forth.*

Cold slices in lent. Draw a thick almond milk with water. Take dates and pick them clene with apples and pears, and mince them with damson prunes; take out the stones out of the prunes, and kerve the prunes in two. Do thereto raisins of Corinth, sugar, ground cinnamon, whole maces and cloves, good powders, and salt; colour them up with saunders. Mingle this with oil. Make a coffin as thou didst before [referencing the previous recipe] and do this fars therein, and bake it well, and serve it forth.

This lenten pie contains fruits and spices (and provides evidence of what kinds of foods would have been stored over the winter to be available in early spring), presumably mixed with the thick almond milk and with oil. The coffins are apparently the same as those in the previous recipe, so the same height and baked without a top.

*172. Tartee. Take pork ysode; hewe it & bray it. Do þerto ayren, raisouns courans, sugur and powdour of gynger, powdour douce, and smale briddes þeramong, & white grece. Take prunes, safroun & salt, and make a crust in a trap, & do þe farse þerin; & bak it wel & serue it forth.*

Tarts. Take seethed pork and bray it. Do thereto eggs, raisins of Corinth, sugar, and powder of ginger, powder douce, and small birds thereamong, and white grease. Take prunes, saffron, and salt, and make a crust in a trap, and do the filling therein, and bake it well and serve it forth.

A pork and bird pie with spices and currants, baked in a trap. A top crust is not specified.

*173. Tart in ymbre day. Take and perboile oynouns & erbis & presse out þe water & hewe hem smale. Take grene chese & bray it in a mortar, and temper it vp with ayren. Do þerto butter, safroun & salt, & raisouns corauns, & a litel sugur with powdour douce, & bake it in a trap, & serue it forth.*

Tart for an Ember Day. Take and parboil onions and herbs and press out the water and hew them small. Take green (new) cheese and bray it in a mortar, and temper it up with eggs. Do thereto butter, saffron, and salt, and raisins of Corinth, and a little sugar with powder douce, and bake it in a trap, and serve it forth.

Ember days were four special fast days in the liturgical year (Mershman 1909); these appear to have been non-Lent fish days, as dairy and eggs are allowed. This tart contains onions, herbs, cheese, and eggs, and is augmented with dried fruit, butter, and spices. The tart is to be baked in a trap.

174. *Tart de Bry.* Take a crust ynche depe in a trap. Take 3olkes of ayren rawe & chese ruayn & meddle it & þe 3olkes togyder. Do þerto powdour gynger, sugur, safroun, and salt. Do it in a trap; bake it & serue it forth.

Tart of Brie. Take a crust inch deep in a trap. Take yolks of eggs raw and rowen cheese [from the glossary, this was an autumn cheese made after the cattle had fed on the second growth in the fields called “rowen”; it was semi-soft but not as soft as a ripe modern cheese, and was called *fromage de gaing* in France] and meddle it and the yolks together. Do thereto powder ginger, sugar, saffron, and salt. Do it in a trap; bake it and serve it forth.

A tart based on an ancestral form of brie cheese that is to be baked in a trap. This recipe hints that baking dishes (traps) were relatively shallow. Based on the recipe that follows, it is also possible that the “de Bry” does not actually reference the type of cheese used.

175. *Tart de brymlent.* Take fyges & raysouns, & waisshe hem in wyne, and grinde hem smale with apples & peres clene ypiked. Take hem vp and cast hem in a pot wiþ wyne and sugur. Take calwar samoun ysode, oþer codlyng oþer haddok, & bray hem smal, & do þerto white powdours & hoole spices & salt, & seep it. And whanne it is sode ynow<sup>3</sup>, take it vp and do it in a vessel, and lat it kele. Make a coffyn an ynche depe & do þe fars þerin. Plaunt it above with prunes damysyns: take þe stones out; and wiþ dates quartered and piked clene. And couere the coffyn, and bake it wel, and serue it forth.

Tart de brie in Lent. Take figs and raisons, and wash them in wine, and grind them small with apples and pears picked clean. Take them up and cast them in a pot with wine and sugar. Take seethed fresh [per glossary] salmon, or codling or haddock, and bray him small, and do thereto white powders and whole spices and salt, and seeth it. And when it is seethed enough, take it up and do it in a vessel, and let it cool. Make a coffin an inch deep & do the filling therein. Plant it above with damson prunes: take the stones out; and with dates quartered and picked clean. And cover the coffin, and bake it well, and serve it forth.

I believe the m (brymlent) is a transcriptional / copying error; this is a significant difference from how the editors of this collection interpreted this recipe based on the glossary that suggests “brym” might reference “brimming” as in full. I have reached an alternative conclusion due to the following evidence: “in” looks a lot like “m” in gothic hands; this recipe immediately follows Tart de Bry, and variants on a theme are typically grouped together; this pie is based on fish and fruits and closely resembles other Lenten recipes. Interestingly for a tart, this recipe is baked in a coffin that has a cover; perhaps sometimes tarts do have tops.

*176. Tartes of flesh. Take pork ysode and grynd it smale. Take harde eyren isode & ygrounde, and do þerto with chese ygrounde. Take gode powdours and hool spices, sugur, safroun and salt, and do þerto. Make a coffyn as tofore sayde and do þis þerinne, & plaunt it with smale briddes istyued & connynges, & hewe hem to smale gobbettes, & bake it as tofore, & serue it forth.*

Tarts of flesh. Take seethed pork and grind it small. Take hardboiled eggs and grind them, and do thereto with ground cheese. Take good powders and whole spices, sugar, saffron, and salt, and do thereto. Make a coffin as heretofore said and do this therein, and plant it with small birds stewed and coneys, and hew them to small gobbets, and bake it as heretofore, and serve it forth.

Another tart recipe that is apparently paired with the one prior, containing pork and small birds augmented with spices, eggs, and cheese. Like the previous recipe, this tart is to be baked in a coffin with a cover.

*177. Tartlettes. Take veel ysode and grinde it smale. Take harde eyren isode and yground, & do þerto with prunes hoole, dates icorue, pynes and raisouns couraunce, hoole spices & powdour, sugur & salt; and make a litell coffyn and do þis fars þerinne. Couer it & bake it & serue it forth.*

Tartlettes. Take seethed veal and grind it small. Take hard boiled eggs and grind, and do thereto with prunes whole, dates cored, pine nuts and raisins of Corinth, whole



spices and powder, sugar and salt; and make a little coffin and do this filling therein. Cover it and bake it and serve it forth.

A unique recipe for tiny veal tarts with dried fruits and spices, that are to be baked in small coffins with top crusts.

*178. Tartes of fysshe. Take eelys and samoun and smyte hem on pecys, & stewe it in almaund mylke and verious. Drawe vp an almaund mylk wip þe sewe. Pyke out þe bones clene of þe fyssh, and saue þe myddell pece hoole of þe eelys, & grinde þat ooper fissh smale; and do þerto powdour, sugur & salt and grated brede, & fors þe eelys þerwith þere as þe bonys were. Medle þat ooperdele of þe fars and þe mylke togider, & colour it with saundres. Make a crust in a trap as bifore, and bake it þerin, and serue it forth.*

Tarts of fish. Take eels and salmon and smite them on pieces, and stew it in almond milk and verjus. Draw up an almond milk with the liquid. Pick out the bones clean of the fish, and saw(?) the middle piece whole of the eels, and grind that other fish small; and do thereto powder, sugar and salt and grated bread, and stuff the eels therewith there as the bones were. Meddle that other portion of the filling and the milk together, and color it with saunders. Make a crust in a trap as before [referencing 176, presumably], and bake it therein, and serve it forth.

This is presumably the fish day version of recipe 176, and all of these tart recipes seem to be a family. In this pie, eels are stuffed with a salmon-based forcemeat, then baked in a pie dish with (presumably?) a top crust.

*179. Sambocade. Take and make a crust in a trap & take cruddes and wryng out þe weyze and drawe hem þurgh a straynour and put hit in þe crust. Do þerto sugur the bridde part, & somedel whyte of ayren, & shake þerin blomes of elren, & bake it vp with eurose, & messe it forth.*

Food (or confection) of Elder Flowers. Take and make a crust in a trap and take curds and wring out the whey and draw [mash] them through a strainer and put it in the

crust. Do thereto sugar the third part, and the same portion white of eggs, and shake therein blooms of elder, and bake it up with rosewater (eau rose), and mess it forth.

Fresh curds are mashed, then sweetened and flavored with elderflowers to make the filling for this pie. Based on the ingredients, this would have been made only during late spring / early summer. The crust is baked in a trap and it does not appear to have a top crust.

*191. Daryols. Take creme of cowe mylke, oper of almaundes; do þerto ayren with sugur, safroun and salt. Medle it yfere. Do it in a coffyn of ii ynche depe; bake it wel and serue it forth.*

Dariols. Take cream of cow milk, or of almonds; do thereto eggs with sugar, saffron, and salt. Meddle it fairly. Do it in a coffin of two inches deep; bake it well and serve it forth.

The filling for this pie is basically a custard -- cream with eggs, sweetened and flavored. This is to be baked in coffins and presumably does not have a top crust. It's interesting to note that when the height of coffins is specified, they tend to be short (the height of a little finger, one inch deep, two inches deep).

*192. Flampoyntes. Take fat pork ysode. Pyke it clene; grinde it smale. Grynde chese & do þerto wiþ sugur & gode powdours. Make a coffyn of an ynche depe, and do þis fars þerin. Make a thynne foil of gode past & kerue out þeroff smale poyntes, frye hem & put hem in þe fars, & bake it vp &c.*

Tart points (or flame points). Take seethed fat pork. Pick it clean and grind it small. Grind cheese and do thereto with sugar and good powders. Make a coffin an inch deep, and do this filling therein. Make a thin foil/leaf of good pastry and carve out thereof small points, and fry them and put them in the filling, and bake it up etc.

A later version of one of the recipes from an earlier manuscript, wherein a pork pie has points of pastry poking out of it like flames. This is done in a low coffin and, aside from the points, does not have a top crust.

197. *Chastletes. Take and make a foyle of gode past with a rollere of a foot brode, & lynger by cumpas. Make iii coffyns of þe self past vppon þe rollere þe gretness of þe smale of þyn arme of vi ynche dep; make þe gretust in þe myddell. Fasten þe foile in þe mouth vpwarde, & fasten þe opere foure in euery syde. Kerue out keyntlich kyrnels above, in þe manere of bataillyng, and drye hem harde in an ovene oper in þe sunne. In the myddel coffyn do a fars of pork with gode poudour & ayren rawe wiþ salt, & colour it with safroun; and do in anoper creme of almaundes, and helde it whyȝt. In anoper, creme of cowe mylke with ayren; colour it red with saundres. Perof anoper maner: fars of fyges, of raysounds, of apples, of peeres, & holde it broun. Perof anoper manere: do fars as to frytours blaunched, and colour it with grene; put þis to þe ovene & bake it wel, & serue it forth with ew ardaunt.*

Castles. Take and make a foil/leaf of good pastry with a roller of a foot broad, and longer by compass. Make three coffins of the same past upon the roller the greatness of the small of your arm of six inches deep; make the greatest in the middle. Fasten the foil in the mouth upward, and fasten the other four on every side. Carve out carefully (or properly) kernels (crenellations) above, in the manner of battlements, and dry them hard in an oven or in the sun. In the middle coffin do a forcemeat of pork with good powder and raw eggs with salt, and color it with saffron; and do in another cream of almonds, and keep it white. In another, cream of cow milk with eggs; color it red with sandelwood. Thereof another manner: forcemeat of figs, of raisins, of apples, of pears, and keep it brown. Thereof another manner: do forcemeat as to blanched fritters, and color it with grean; put this to the oven and bake it well, and serve it forth with “burning water” [flaming spirits, such as brandy].

203. *The pety peruaunt. Take male marow hole parade, and kerue it rawe; powdour of gynger, sugur, ȝolkes of ayren, dates mynced, raisouns of couraunce, salt a lytel, and loke þat þou make þy past with ȝolkes of ayren & þat no water come þerto; and fourme þy coffyn and make vp þy past.*

Take [?] marrow whole pared and carve it raw; powder of ginger, sugar, egg yolks, minced dates, raisins of corinth, salt a little, and look that thou make thy pastry with yolks of egg and that no water come thereto; and form thy coffin and make up thy pastry.



## Appendix 4: On Medieval Grains

As described earlier in this document, for my pie crust project last year I undertook a significant study of medieval wheat varieties. My major findings are reported below.

One potential source of information on medieval cereal crops is blackened roof thatch from standing medieval buildings. Layers of soot-blackened thatch survive on some medieval English buildings dating from the medieval period (specifically the 14<sup>th</sup> and 15<sup>th</sup> centuries) and John Letts (see sources) has examined over 200 samples, all originating from the South of England and most coming from Devon. (Typically roofs in the north of England were thatched with water reed or sedge [Ambrose and Letch].) These samples have preserved not only grain-bearing plants (with both the ears and straw intact), but also crop weeds and other vegetables. These roof samples provide us with a glimpse into complete medieval fields, and allow us to see how crops changed over time. The most significant finding is the diversity of crops within a medieval field:

Most samples contain 'land race' mixtures of bread wheat (*Triticum aestivum*), English rivet wheat (*Triticum turgidum*) and rye (*Secale cereale*) which grew to 6ft (1.8m) or more in height - far taller than modern varieties - as well as barley (*Hordeum vulgare*) and oats (*Avena spp.*). Land races evolve over many centuries when crops are grown in heterogeneous conditions, year after year, from seed saved from the previous year's crop. The result is that every plant in a land race is slightly different from its neighbour, and medieval cereals were consequently very uneven in straw height, ripening time, grain yield and other agronomic traits. This diversity ensured that a portion of the crop almost always set seed irrespective of the many environmental stresses that can destroy a crop such as drought, waterlogging, frost or crop disease. (Letts)

The most abundant grain in these samples was bread wheat, although this study does not specify any specific recognizable varieties of bread wheat or characteristics such as grain color, etc. One significant difference between modern wheat crops and the evidence from roof thatching is the presence of rivet wheat among the medieval samples. Although rivet wheat is no longer grown commercially on any significant scale, 60% of the roof samples contained at least some rivet wheat. (ibid) Rivet wheat tends to produce high quality thatching straw, so it is possible that it was of greater importance historically for

this reason. As many of the roof samples are composed of threshed straw and threshing waste, it is reasonable to conclude that these samples accurately reflect food crops.

Within this threshing waste additional plant taxa are found, including legumes such as broad beans and field peas (both important foods mediievally and most likely left over or introduced via other crop rotations) as well as numerous weed species, again indicating that medieval fields were significantly more diverse than modern fields. It is possible that seeds from some of these plants may have been milled along with the wheat grains, although the impact on the finished flour would presumably be negligible. (ibid)

Modern wheat (and other cereal grains) are grown as monocultures, vastly different from the diversity of medieval fields. The stark reality is modern wheat bears very little resemblance to its medieval ancestors (for discussion of genetic changes in wheat over time, see Haudry et al and Peleg et al in sources). The number of wheat varieties grown in the UK has dropped precipitously since World War II (Ambrose and Letch): in the 1830s, some 150 named wheat landrace varieties were described, and in the 1920s and -30s 63 wheats from across the UK were collected, classified, and catalogued. But by 2003, only three landraces were recorded (specifically as being grown for thatching). (ibid) Typically early landraces referenced place names, and it is highly likely that each region in England had a unique wheat variety historically.

Although medieval records differentiate between types of crops (e.g. wheat vs. rye), they do not differentiate between varieties within a crop. For example, wheat is universally referred to as *frumentum* in manorial records of the period (Stone). 16<sup>th</sup> century written accounts differentiate between different varieties of wheat, but I have found little evidence as to when these varieties appeared or whether medieval people used different wheat varieties for different purposes. Generally the evidence suggests that any single field would contain a mixture of genetically distinct wheat plants and different areas would have their own unique wheat variety, so it is unlikely that the universal term implies that wheat was a homogeneous crop. The lack of distinction between different wheat varieties could suggest that people simply used whatever wheat was available to them for any given purpose rather than using individual varieties purposefully.

This lack of information about medieval wheat varieties is frustrating for the modern cook, as different varieties of wheat have vastly different properties. Since wheat would have been the flour used for pies prepared in high status contexts, I felt I needed to find additional information about the qualities of medieval wheat flour. The major distinction between modern wheat varieties is between hard red and soft white wheat. Hard red wheat is higher in gluten and preferred for bread baking, while soft white wheat is higher in starch and is preferred for, among other things, pie crusts. Even when late medieval or post-medieval texts describe particular varieties of different cereal crops, it is essentially impossible to correlate these characteristics with modern varieties (Moffet).

Other written sources do not provide any more clarity. In his translation of Galen's *On the Properties of Foodstuffs*, Powell notes that the different varieties of wheat known to Galen were einkorn, emmer, durum, and bread wheat, but does not distinguish between different varieties of bread wheat (*T. aestivum*). By the very end of the 16<sup>th</sup> century, John Gerarde in his *Herball* mentions white wheat, red wheat, and flat wheat by name; from the description and its accompanying picture flat wheat may refer to rivet wheat. It is not clear if the white and red wheat of Gerarde correspond to the varieties of the same names of today, or if they do when these varieties appeared.

There are a few things we do know for certain: medieval wheat was a winter crop, and was bred from ancestral wheats such as einkorn, emmer, and spelt. Both hard red and soft white wheat are winter crops (although there is also a spring hard red wheat). In comparing different modern and historical wheat varieties, one can see how each varies in macronutrient composition, which can allow us to make some educated guesses about medieval wheat. All data are from the USDA unless otherwise specified:

<i>All values are per 100g</i>	<b>Einkorn*</b>	<b>Emmer**</b>	<b>Spelt</b>	<b>Soft White</b>	<b>Hard Red</b>
<b>Water</b>	<i>N.D.</i>	<i>N.D.</i>	11.02	10.42	13.10
<b>kCal</b>	347	362	338	340	327
<b>Protein*** (g)</b>	18.2	12.77	14.57	10.69	12.61
<b>Total lipids (g)</b>	2.48	2.13	2.43	1.99	1.54
<b>Carbohydrate (g)</b>	[65.5 g starch]	72.34	70.19	75.36	71.18
<b>Fiber (g)</b>	8.7	10.6	10.7	12.7	12.2
<b>Sugars (g)</b>	2.67	<i>N.D.</i>	6.82	0.41	0.41

\*No USDA data available. Data given are from [www.einkorn.com/wp-content/.../Grain-Nutrition-Comparison-Matrix.pdf](http://www.einkorn.com/wp-content/.../Grain-Nutrition-Comparison-Matrix.pdf).

\*\*No USDA data available. Data given are from <http://www.bluebirdgrainfarms.com/nutritional-information.html>

\*\*\*Total, so includes both gluten and other proteins.

It is interesting to note that all of the “ancient” wheat varieties (as they are grown today; these are not living fossils, but modern crops that have certainly undergone evolutionary changes from their ancestral forms) contain a greater amount of protein even than modern hard red wheat. However, the gluten content in historical grains is said to be lower than the gluten content in modern wheat, as breeding wheat to contain more gluten (for better bread baking) has been a major aim of industrialized agriculture. Spelt in particular is generally considered poor for bread baking by modern bakers. This suggests to me that medieval bread wheat would have tended to have less gluten than modern hard bread wheat. I was unable to find macronutrient data on rivet wheat (*T. turgidum*), but I did find a reference to it being “better suited to biscuit- than to bread-baking” (Hamerow et al) which suggests a relatively low gluten to starch ratio.

Please see bibliography for full citations.