

PFI: Yields

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Yields for SB and Corn in acre buschel per pound.

```
pfi <- read.csv("/Users/marianwaitwalsh/GitHub/PFI/data/PFI_clean.csv")
weather <- read.csv("/Users/marianwaitwalsh/Classes and Work/PFI/IA_annual_rainfall.csv")
library(dplyr)
library(tidyr)
library(reshape2)
library(ggplot2)
```

```
yields <- pfi %>%
  filter(item_type == "Unit Quantity", crop %in% c("Corn","SB")) %>%
  select(-c(item, item_type)) %>%
  group_by(field_id, year)
```

```
wBoone <- weather %>%
  filter(stationName == "Boone") %>%
  gather(key, value, 5:373) %>%
  separate(key, into = c("year", "key"), sep = "\\_") %>%
  spread(key, value) %>%
  select(year, MAXT, MINT, PREC)
```

```
wBoone$year <- sapply(wBoone$year, FUN = function(x) extract_numeric(x))
```

```
inner_join(yields, wBoone, by = "year")
```

```
## Source: local data frame [125 x 8]
```

```
## Groups: field_id, year
```

```
##
```

##	year	farmer	field_id	crop	value	MAXT	MINT	PREC
## 1	1988	Boone	1	Corn	87.10	62.3	34.9	23.11
## 2	1988	Boone	2	SB	24.00	62.3	34.9	23.11
## 3	1988	Thompson	1	Corn	116.63	62.3	34.9	23.11
## 4	1988	Thompson	2	SB	41.45	62.3	34.9	23.11
## 5	1988	Thompson	4CD	Corn	111.39	62.3	34.9	23.11
## 6	1989	Boone	1	Corn	130.50	58.5	34.5	25.02
## 7	1989	Boone	2	SB	41.50	58.5	34.5	25.02
## 8	1989	Thompson	2	Corn	145.40	58.5	34.5	25.02
## 9	1989	Thompson	4CD	SB	54.34	58.5	34.5	25.02
## 10	1989	Thompson	5	Corn	113.30	58.5	34.5	25.02
##