

# '75 momentous year for Staley

The past year was one of the most momentous in company history. Record sales and profits for fiscal 1975 serve as a basis for the challenge of the future. It's a challenge Staley is meeting through vigorous expansion and sophistication of manufacturing facilities and product line, and through the increasingly important role played by all its employees.

As a reminder of the history-making epoch for Staley which took place during the past 12 months, the following flashback is presented:

**JANUARY**--The year gets off to a prophetic start as first quarter sales and profit show an increase over the previous year's figures. Sales for the quarter were \$204.1 million compared to \$121.9 million, while earnings jumped to \$10.4 million from \$1.9 million.

--Crush International, bottler of Orange Crush, Hires Root Beer and Sundrop soft drinks, approves the use of high fructose IsoSweet as a complete replacement for sugar.

--More than 600 employees and retirees attend the 28th annual service awards dinner at the Masonic Temple in Decatur.

--Wagner starts its first ever television commercials and print ad campaign.

--Corn milling TEAM No. 4 composed of George Williams, Cecil Beel, Lloyd Blankenship, Leck Carter, Herb Cochran, Lee Delhaute, Lauren Incarnato, Richard Jackson, Hugh McMullen, Dale Seiber, Roger Lester, and Henry White takes TEAM-of-year honors.

**FEBRUARY**--Plans for the construction of a new corn milling plant in Lafayette, Ind., are announced. The \$85 million facility for the production of corn sweeteners represents the most ambitious capital expenditures in company history.

--Staley directors vote an increased dividend to an annual rate of \$2 per share from \$1.60 and authorize a 2-for-1 stock split contingent upon shareholder approval.

--Staley specialty feeds introduces new Mol-Phos. --Morrisville employees set a new production mark for IsoSweet as a 50 percent expansion goes "on stream."

**MARCH**--A. E. Staley, Jr., chairman of the board, passes away on March 19. Mr. Staley, 71, had headed the company since 1941. He was elected president of the company in 1932 and assumed the additional duties of chairman of the board in 1941.

--The company announces it will discontinue operations at Staley Chemical's New Jersey facilities and reorient its chemical business which is to be headquartered in Decatur with production facilities at Lemont, Ill.

--A new generation of soy product-improved soy concentrate, soy four and concentrated textured protein-is announced. They will be produced at 99 building which is to be completed by December 1975.

--Ruth Lichtenberger, Don Adcock and Fred Ridlen take honors in the 1st annual Russ Dash bowling tourney, formerly called the Staley News tourney.

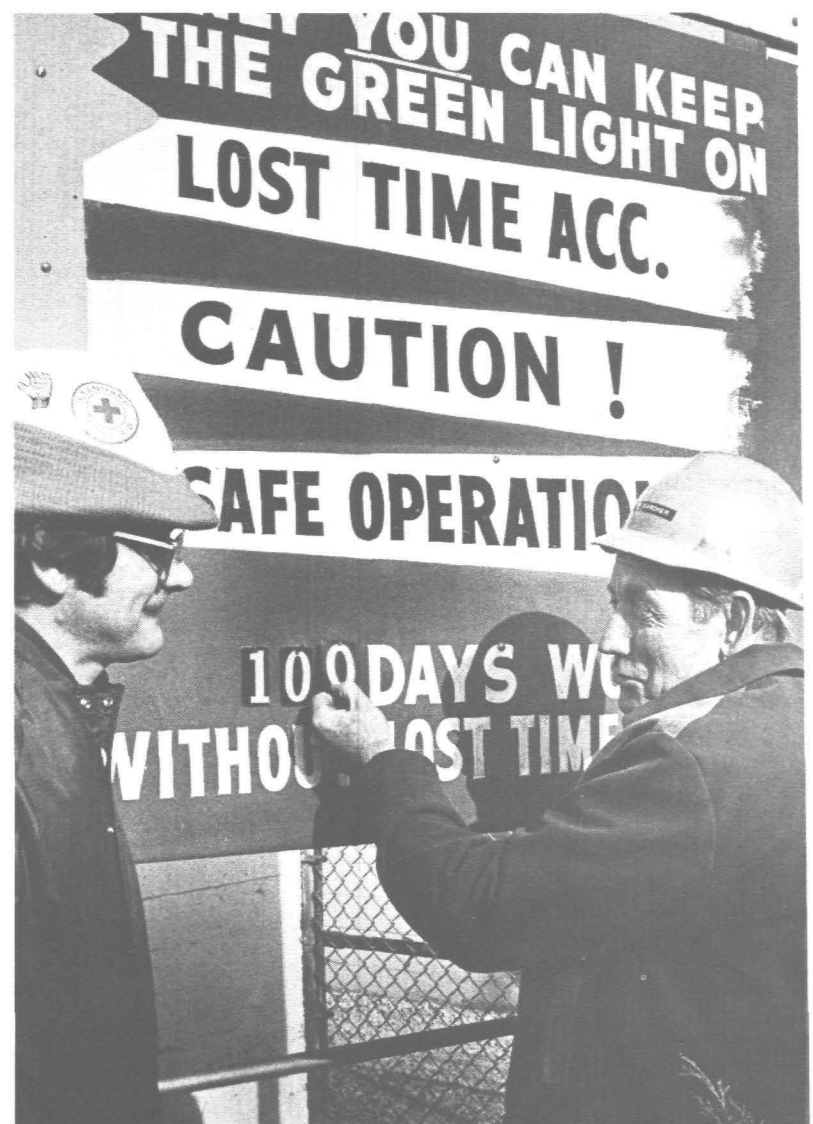
--The SuperStars take the title in the Staley basketball league.

--Sta-Puf blue starts national rollout with intensive flight of television commercials.

--Construction begins on a softball diamond for Decatur employees.

**APRIL**--Second quarter figures are announced and strong demand for corn sweeteners spurs gains.

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Safety Director Tom Ellison, left, and Ernie Karcher, chairman of Local 837 AIW's safety and health committee, post 100 days worked without a lost time accident at Decatur on the plant's safety scoreboard.

## Decatur plant safety string reaches 100 days

As Staley News went to press Decatur plant had worked 100 consecutive days without a lost time accident.

It is the second outstanding safety mark attained during the past six months. Before the start of the current string, the plant put together 77 consecutive days or one million manhours worked without a lost time accident. During the

current string, more than 1.35 million manhours have been logged.

The record becomes even more amazing considering that the general industry average is slightly more than 10 lost time or disabling injuries per million manhours worked, and the rate for the food industry, of which Staley is a part, is more than 18 lost time injuries per million manhours worked.

Traditionally, Staley has been a safety leader in the food industry group which it is assigned by the National Safety Council.

Decatur plant is, as are other Staley manufacturing locations, currently involved in the Safety Spirit of '76 promotion and sign-up approached nearly 90 percent among eligible employees.

Only a rash of reportable injuries during November (see page one) marred the plant's safety record.

Safety Director Tom Ellison praised the safety performance of employees, noting that employee vigilance and attitudes are the primary factors in shaping a positive safety attitude.

George Prust, industrial relations director, echoed Tom's sentiments adding, "The Staley company has made tremendous strides in the past year. But certainly one of the most satisfying accomplishments is a continuing one of employee well-being made possible with this tremendous safety performance. All employees who helped make it possible are to be commended."

## Soy protein complex starts

Production began in mid-December in the new soy protein complex at Decatur with the manufacture of soy flour.

The production is the first in a series of steps which will see the full complex come on stream in early 1976, with production of regular soy flour, new Bland 50 soy flour, soy grits, textured proteins and Procon protein concentrate.

Modernization and expansion of the company's protein manufacturing capacity is part of a multi-million dollar effort.

In January, textured protein production facilities start with full production expected to come on stream during February. In early March production of Procon will begin.

The products coming from the complex represent a new "generation" of soy protein products which have superior flavor characteristics for use in a wide variety of food applications.

In no instance does the flavor improvement of the products adversely affect their protein content.

Preparation--dehulling, halving and flaking of soybeans--will take place in 101 building. The extraction process will occur in 108 building, following which the flakes will be pneumatically transferred to 99 building for grind into flour or grits or textured protein.

The soy concentrate, which has a protein content of 70 percent on a dry basis, is derived by a process which removes the carbohydrates from soy flour. It will be produced in 108A building.

# Staley News

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## Reportables mar safety performance

While Decatur plant has compiled an enviable string of consecutive days worked without a lost time accident, another of the safety goals for fiscal 1976 is proving more elusive--the number of reportable injuries per month.

A reportable injury is defined as one which calls for treatment away from the plant, but does not cause an employee to miss work the next day as does a lost time injury.

The goal is an average of 15 reportables a month. In October there were 14 reportables, but seven falls in November helped run that month's figure to 19.

The next largest contributor to reportables in November was foot-related injuries, as three employees dropped objects on their feet.

As is usual with reportable injuries, nearly 90 percent of this year's total can be attributed directly to unsafe acts. The remaining causes are divided between unsafe conditions and unidentified uses.

Tom Ellison, safety director at Decatur, urges employees to take proper safety precautions at all times.

"There are several ways of doing this. An employee should make sure he has the proper safety equipment required to do a job. This includes using tools for the job for which they are designed.

"Also, if an employee isn't familiar with the requirements of a job, he should contact his supervisor. If he sees an unsafe condi-

tion, he should report it. And each job should be approached individually. There isn't any 'routine' to safety."

## Wagner introduces drink concentrate

Staley will market a new Wagner non-carbonated fruit drink concentrate beginning Jan. 1.

Marketing of the new consumer products entry will be handled by the food service division located in Oak Brook. The concentrate will be produced in four flavors--orange, lemon, grape and fruit punch--at Cicero.

Dick Purcell, product manager, food services, consumer, says that nearly two billion pounds of drink concentrate was sold to the food service market in 1972, the latest year for which full figures are available.

"The users of a concentrate look for a product that is economical, easy to use and good tasting," Dick says. "We believe the Wagner reputation in each category can help us gain a foothold in this market."

Dick says the new concentrate which mixes at a ratio of one part of concentrate (liquid form) to 15 parts of water will be offered initially in a seven state area of Ill-

inois, Indiana, Iowa, Kentucky, Missouri, Tennessee and Wisconsin. Plans call for expanded distribution before mid-1976.

## Sno-Bol makes market gains

Sparked by a dramatic television commercial showing its cleaning superiority, Super Strength Sno-Bol liquid has gained a 44.8 percent share of market in the more than a third of the nation where it is sold.

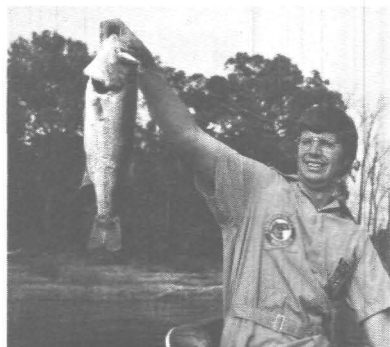
The figure makes Sno-Bol liquid the highest selling brand in its geographical market areas and is a new high for the popular cleaner.

The television commercial features a mechanical device with scrub brushes using Sno-Bol and other brands to clean stained porcelain. The Sno-Bol liquid cleaning time is dramatically shorter than the other brands.

In the News...



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Fish story P/4







## Nu-Col helps Dean's make quality dressing

The unique properties of Staley Nu-Col 326 modified starch have enabled Dean Foods, Inc., to use it as a 100 percent replacement for gums in its Hoffman House Thousand Island salad dressing.

Dean began using Nu-Col 326 in its Thousand Island salad dressing nearly six months ago. The company had tested four different types of starches before deciding on Nu-Col 326.

Dr. Daniel Green describes Hoffman House as a quality pourable dressing with a viscosity best described as "almost spoonable." The thickness of the dressing demands an agent that will disperse the flavor of the oils throughout the dressing, says Dr. Green. And although they had been used for years, gums did not always perform to Dean's high quality standards.

Dr. Green, director of research for Dean, explains that the company had been looking at alternatives to gums for some time. In addition to quality, he cited fluctuations of supply and price as another reason. The company had used tragacanth and propylene alginate gums. The latter has undergone spiralling cost increases recently as supplies dwindled.

Formerly, starches had been rejected by Dean for use in its cold water process system because most of the types available were pre-gelatinized and lacked the granular properties necessary for a smooth, even viscosity dressing. Instead, the pre-gelatinized particles would

not disperse properly, and the dressing made in sample batches had a grainy texture. Starch breakdown was also a problem.

### Stabilizer

"We were interested, however, in starch as a stabilizer even before the current price spiral," Dr. Green notes. "It was our belief that a starch with the proper qualities could perform the same function as gums with no sacrifice in quality."

Dr. Green says Dean's tests showed Nu-Col to be the only starch available which offered the smooth appearance once thought to be possible only with a cooking system or with gums. He attributes the performance to the hydration capabilities of the starch.

Although Dean undertook a minor reformulation of its Thousand Island dressing to attain the desired flavor, no production changes were required from a normal cold system.

Hoffman House Thousand Island dressing is produced in 300 and 900 gallon stainless steel kettles. The first step is blending of water, vinegar and liquid sugar, after which the Nu-Col 326 is added. Blending takes about 15 minutes for the desired viscosity to be attained. The final step is the adding of the oil, further blending homogenizing and bottling. No pre-blending of the starch with other ingredients is necessary.

## Wet milling key to corn's potential

(This is the second of a series on American agribusiness and Staley's role in it.)

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What does the eye behold? It depends upon the beholder as evidenced by the way different people might look upon the acres of corn fields stretching across the nation.

To the historian, corn is the native American grain which is part of our heritage from the American Indian. To the farmer, it is the fruit of his labors, the source of cash which will repay a loan for a new tractor (in a good year), and visible evidence of his skills. But to the corn processor, a corn field ready for harvest is immediately transformed into sweeteners, starches, adhesives and animal feed ingredients. It is a living factory that will provide, year after year, the raw material for hundreds of products that are used in food and industrial applications.

Although it uses just slightly more than six percent of the annual harvest, perhaps no other industry so exemplifies the potential that has helped make corn such an important crop as the wet milling industry.

The wet milling process is the key that transforms the hard yellow kernels into those products.

The wet milling process is a continuous one. No single product can be produced without corn grinding, finishing and by-product departments running at the same time.

### Process begins

The process at Decatur begins in 4 building where the corn is placed into steepers—some wooden, but the newer ones stainless steel—with capacity per steep for up to 8,400 bushels of corn. The steepers contain SO<sub>2</sub> water in which the corn will be stored for up to 50 hours. Following that the corn kernels are ready for milling in 6 building and the drained steep water which contains much of the soluble protein, carbohydrates and minerals of the corn is pumped to 9 building where it is concentrated in evaporators before being pumped to 14 building for drying into Dried Steep Liquor Concentrate (DSL) a highly popular animal feed ingredient.

The next step after milling which loosens the germs from the starch and hulls is a drying process in 11 building. The germ is separ-

ated in hydrocyclones and pumped to 11 building where part of the oil is extracted following dewatering and drying. The remainder of the oil is extracted through a solvent process in 18 building. The extracted oil is refined in 29 building.

Refined corn oil is widely used as an ingredient in cooking and salad oils and in quality margarines. It is popular with food processors because free fatty acids, gums, color, waxes and odors are removed and do not linger to mask flavors or discolor products.

Meanwhile, the process on the corn continues in 6 building where fine grinding is taking place to separate the starch from the fiber. The fiber is further separated on bent screens, after which it is pumped to 9 building where it is dewatered in presses. After drying in 9 building, part of the fiber is air conveyed to 75 as product. The remainder is air conveyed to 14 building to be added to the steep water and germ meal left after oil extraction for mixing into DSLC.

### Merco department

The milled starch's next stop will be in the Merco department, also in 6 building. The Merco process further separates the starch from the remaining gluten, leaving two distinct products—starch and gluten.

The gluten is processed in 14 building into corn gluten meal, a high protein (approximately 60 percent) ingredient for use in animal feeds. Gluten meal has found a special niche among poultry producers and, lately, in dried pet foods.

Gluten feed is a combination of DSLC and hominy feed, resulting in a feed with 21% protein content.

Starch is a highly versatile corn product which can be used for manufacture of food starches or industrial grade starches or as the base for corn syrups ranging from those with low dextrose equivalent (DE) to the sophisticated high fructose IsoSweet, the result of advanced enzyme technology.

Basic or pearl starches are flash dried in 26 building. Starch slurry for modification into food starches is pumped to 16 building for blending with chemicals which impart specific functions and properties to the starch. It is dried in 12 or 20 buildings. The process for Nu-Col starch takes place entirely

in 113 building, while non-food starches are manufactured through either an extruding process or on roll dryers in 118 building. Modified food starches are used in canned, frozen and easy-to-use foods. Industrial starches are used primarily by the paper industry to add a range of desired qualities, or by the textile industry.

### Sweeteners

More than 60 percent of the 10.5 billion pounds of starch generated annually by the corn wet milling industry is converted into sweeteners.

The conversion (hydrolysis) is achieved in large cookers where starch slurry is diluted with an acid and/or enzyme before being heated to specific temperatures. The process is halted at various points according to the type of sweetener being produced. The higher the degree of conversion, the sweeter the syrup and the higher its DE.

The basic types of corn sweetener—malto dextrins (20 DE or less) or corn syrups.

There are four types of syrups with DEs ranging from 22 to 52 DE.

Corn sweeteners have made headlines in recent years as food and beverage processors seeking initially to avoid the high price of sugar turned to them—especially IsoSweet—in increasing numbers. Even as the price of sugar declined, sales of corn sweeteners remain high.

One of the amazing things about the wet milling process is its efficiency. There has been a nearly 100 percent utilization of the grain. Every fiber, bit of starch and germ has been utilized. Even the steep water has been recovered to make an important feed ingredient...it's a part of the performance that American agribusiness generates.

## Awards dinner set for Jan. 22

More than 600 employees and retirees are expected to be on hand at the 29th Annual Service Awards Dinner Thursday, Jan. 22, at the Masonic Temple in Decatur.

Attendees will include active employees and retirees with 10 years or more of service.

Three employees will be recognized for 40 years of service and 94 will mark 25 years with the company.



Lewis Fuqua



Kermit Wright



Andrew James



Harold Pieper



George Nickell



Morris Birkhead



George Pinney



Gerald Reece

## Anniversaries

35 Years  
DOROTHY RAY, operator, 20 building  
HAROLD CRAIG, territory manager, sweetener sales

30 Years  
ALVA JORDAN, ion exchange operator, 10 building  
EUGENE COLLINS, assistant extraction operator, 101 building  
LEWIS FUQUA, evaporator operator, 9 building  
JAMES LONG, conversion operator, 5 building  
KERMIT WRIGHT, utility lubricator, 42 building  
PAUL KELLEY, 6 building operator, 6 building  
ROBERT BYRUM, development engineer helper, 59 building  
DEWEY HENDERSON, mechanic senior, sheetmetal  
JOHN WALLER, preparation operator, 101 building  
CHESTER JONES, bag marking operator, 20 building  
MAURICE SMITH, senior analyst, 60 building  
RALPH SHINNEMAN, senior painter-roofer  
ANDREW JAMES, fireman west end, 1 building  
GEORGE NICKELL, extraction tower operator, 11 building  
WILLIAM VAN FOSSAN, stores clerk, 77 building

MORRIS BIRKHEAD, project engineer, corporate engineering  
GEORGE PINNEY, senior applications chemist, R&D  
HARVEY BAKER, assistant foreman, dry starch

GERALD REECE, supplies & ingredients expeditor, industrial administration  
ROBERT COOLEY, assistant foreman, maintenance oil/feeds, agri-products  
HAROLD PIEPER, import & claims supervisor, industrial  
CHARLES BAKER, foreman, sheetmetal/boilermaker, maintenance

25 Years  
LEWIS CARR, reel tender, 20 building

15 Years  
HAROLD MCNEELY, maintenance A leadman, Houlton  
JUDY SADOWSKI, secretary/president and chief executive officer  
RUE COPELAND, secretary/quality assurance

10 Years  
THOMAS ROBERTS, track leadman, 28 building  
WILLIAM MCMAHAN, rigger leadman, 31 building  
MARY SCHERER, staff nurse, industrial relations  
BOBBY BUSH, territory manager, sweeteners, Cleveland  
JUDY WIDICK, grain buyer, agri-products

5 Years  
M. VASQUEZ, line inspector, Cicero  
L. M. SANCHEZ, decaser operator, Cicero



# Employees from around world tell of Christmas customs

As Staley employees gather this year to celebrate Christmas, many will observe traditions that are unique to a variety of cultures and life styles. The universality of the holiday and religious observance, however, is not detracted from by these differences, but instead give a color and vitality which helps explain the true meaning of the season.

What are some of these customs? To take you on an around-the-world tour in almost as short a time as it would take the fabled reindeer team of the United States Santa Claus, News presents this armchair sleighride. So hold on... and on Dancer, on Prancer, etc.,

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A popular song in the U.S. says, "You'd better watch out, Santa Claus is coming to town." In George Wack's native Switzerland, children might take that warning to heart, because rather than being the focal point of so many activities as he is here, Santa Claus is transformed into St. Nicholas. St. Nicholas day is December 6, and in one similarity to U. S. observances, the kindly old man brings with him a sack of candies and treats to give to the good children. But, for those who have been bad...well, watch out, because jolly old St. Nick is going to carry you away with him into the forest in that bag after it's emptied of all the treats the older children get.

George, assistant manager, technical services, international, came to the U.S. in 1947, apparently avoiding being carried away for any length of time.

While that part of the holiday observance has had to be relegated to the halls of memory another part of the Swiss Christmas lives on in the tree decorations.

George's wife who is also Swiss has inherited antique Christmas decorations which were used by several generations from the charming mountainous country of Switzerland.

Every Christmas Eve as his father and grandfather before him, George reads the Christmas story in German from his father's Bible to the family. Then they all sing old Christmas carols and open their gifts.

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As Prem Shankar Singh des-



George Wack and his wife, Ruth, place some of the antique Christmas decorations from Switzerland on their tree, continuing a long standing family tradition.

cribes Christmas observances in his native India, one cannot help but be impressed by its spirituality.

Each Christmas day, the Christian churches in his home town host upwards of 10,000 people in an observance that includes a parade with elephants and camels, followed by a community worship and dinner. Love is the keynote, explains Prem, as Christians, Moslems, Hindus, Buddhists and all faiths participate. The women wear red, a symbol of love. Even the elephant, associated with Buddhist divinity, gets in on the act wearing brilliant red cloth.

There is no Santa Claus and no gift exchange except the love that the participants share. This feeling of communal worship is something that Prem misses, pointing out, "If I have a misfortune, my neighbor knows nothing of it because in America Christmas is a celebration for individuals and families. I miss the sharing." Perhaps the memory of that sharing is one of the reasons Prem enjoys the annual Christmas gathering of all the employees who work on the third floor of the administration building and their families. "This is a meaningful celebration," Prem continues. "It's a feeling I would like to share with other employees."

Prem acknowledges that his children have quickly adopted the American ways with trees, presents and Santa Claus. But in a poignant touch Prem's wife will wear her traditional Indian dress at observances in the home and with friends—a bright red dress that speaks eloquently of joy and love.

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Korea is fabled as the Land of Morning Calm. Undoubtedly to the thousands of Americans who defended liberty there, the name is more than slightly ironic. But to those who have seen it in peace, the beauty of the mountainous landscape punctuated with the valleys of villages and crops, does indeed impart a feeling of calm.

As one might expect, South Korea—especially in the larger cities—has been greatly influenced by its western allies in religion, speech and habits. That's why when asked to describe a Korean Christmas, Kim Myung's answer isn't too different from the observances in the United States.

"It is a time for family and friends to get together," he re-

calls. "And upwards of a dozen services are held on Christmas day in the Seoul Presbyterian Church, the largest, I am told, in the world."

Kim says the typical Christmas day dish would include kimchee (a fermented cabbage, not too different, although somewhat spicier than, sauerkraut), rice, a soup and a meat dish of some sort. The cities are, he recalls, more westernized than the villages, especially those to the north, closer to the Demilitarized Zone, where U.S. soldiers and North Korean troops keep a wary eye on each other's movements, a sorrowful reminder that the world is not really any closer to peace on Christmas eve in 1976 than it was 2,000 years ago when a new hope of peace was presented.

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While children in the United States might sleep with visions of sugar plums in their heads on Christmas eve, their counterparts in Puerto Rico spend their sleepless night on Jan. 5, before dreaming of the visit of the three wise men.

Myrna Kohnke, clerk-typist, Vico, recalls how as a child she and the other children would stuff a shoebox with hay and place it under their beds on the evening of Jan. 5.

"The hay was for the camel of the wise men, and when we woke up the next morning, we would find the hay gone and a toy in its place," she says.

"Christmas in Puerto Rico is a two-week celebration beginning with Mass on Christmas Eve and concluding with the Jan. 6 observance of the visit of the wise men to the Christ child."

Although there was no gift exchange on Christmas Eve, the people made up for it with their enthusiasm and friendship, recalls Myrna.

"After Mass—usually about 9 o'clock in the evening—we would gather for the singing of Christmas carols and to roast a pigling for the community Christmas feast. It was a colorful time, and I'm sorry that we have lost some of the flavor of those days since coming to this country." Lost? Probably not, since Christmas is a time of memories, and for Myrna, now of Chicago, Noche Buena—Christmas in Puerto Rico is as fresh in her



Prem Singh, his wife, Gayatri, and children exchange gifts. Mrs. Singh and two of the children are dressed in traditional garb reflecting the joy of the holiday season.

memory as though it were only yesterday.

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Sleigh rides, caroling, candles on Christmas trees and St. Nicholas with a bag and a switch are among the childhood Christmas memories of Henry Colbert, who retired as 6 building foreman in December 1967.

It was in Germany that the Christmas tree was introduced, and Henry can recall how he and his family would either buy a fresh tree or join friends in cutting one down from the nearby woods.

Jan. 6 was the big day for children. In each village St. Nicholas, garbed much as he is pictured in America today, would appear, a bag over one shoulder and a switch in his hand. The children were warned that if they had been bad, St. Nick would switch them, but Henry laughs as he adds that to the best of his memory, no children ever felt the sting of the switch. Instead, each was given a small toy or a bag of candy or nuts.

The holiday was observed on Dec. 25 and 26, rather than the 24th and 25th as in this country. But, in one similarity, it was time for families to get together, usually to enjoy a feast of duck or goose.

The religious aspects of the holiday were not forgotten, however, and often following an evening of caroling, young people would attend church as early as 4 o'clock in the morning. This

year, the Luthern Church to which Henry belongs will observe a special celebration entirely in German.

It has been more than 50 years since Henry came to this country, but even today, his stories capture the warmth of those Christmas traditions of the Germany of another day before a wall was erected as a highly visible reminder of the differences which divide us.

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Because of his role as a minister Christmas has a special meaning for Ernie Rade who acts as parson for the Greenswitch Church of God.

Ernie, senior mechanic, millwrights, says he felt the call to preaching after his personal conversion. It is a role he has filled for the small church for seven years.

Every year on the Sunday before Christmas the parishioners meet for a religious observance. Afterwards, gifts are passed around to each member of the church.

Like many other families across the country, Ernie will spend Christmas day with his family beginning with a breakfast.

Friends, fellow worshipers and family—each one means a lot to Ernie's Christmas observance but the most poignant moment is as Ernie describes his own spiritual renewal each year and how the season reminds him of the miracles in the Bible which he tells to his parishioners so often. And the biggest miracle might be the sharing of feelings from around the world at this time.

## Holiday Greetings

As we observe another holiday season, it is an opportune time to reflect on the past year.

The company has just concluded the most successful year in its history. Such an accomplishment would not have been possible without the contributions of each of you.

The coming year will offer new challenges to us as individuals and as a company. I know that you will respond as you always have, with the enthusiasm and dedication that has made Staley a unique company.

I want to express my gratitude for your past contributions and to wish a happy holiday season for you and your family.

*D. E. Nordlund*

D. E. NORDLUND





This handsome catch is proof of the pudding that Steve Dickman's system does the job.

## Science key to fishing for 'calculating fisherman'

To the millions of people who have journeyed the far reaches of space via the long-running "Star Trek" series, Spock's statement, "The logic of it is undeniable" is a phrase that the pointy-eared Vulcan uses with the ease of breathing.

How Spock would have loved Steve Dickman, staff chemical engineer, for the 6 foot 5 inch Staley employee has set out to remove superstition, guessing and what Spock would refer to as "the inescapable human weakness—emotion" from one of the most emotional human involvements of all—fishing.

Combining the scientific knowledge of the chemist, the numbers of the mathematician, the mind of an engineer and the wizardry of the computer, Steve has set out to make fishing a sporting venture that is supported by observation and logic.

The result is now available in a book called "The Calculating Fisherman" which Steve co-authored with two friends.

"I'm an engineer by training," Steve explains, "and if engineers have a strength—or weakness—it's that we believe any problem can be solved if enough reliable data is gathered and if enough experiments are tried."

One of Steve's co-authors of the book is Clyde Weder, who owns some well-stocked lakes in southern Illinois. Steve explained his theory to Clyde, who, although somewhat skeptical, agreed to help out in any way possible.

Steve reasoned that Clyde's lakes would make an ideal laboratory. By having numerous fishermen of varying skills report their catches and having all the conditions recorded, Steve was certain he

would come up with a correlation that would be a basically fool-proof system.

Clyde therefore collected catch data from anglers three times each day and consistently recorded water temperatures. Air temperature, barometric pressure, wind direction and sky conditions were recorded as was the oxygen content of the water.

The data was collected for 105 days and the number of fisherman hours involved in study surpassed 12,000. Steve was certain he now had the basis for a scientific survey of fishing, so he fed the results into a computer and anxiously awaited the results.

They were negative.

The computer said, "no correlation." Attempts at prediction were unreliable and it looked as though Steve had merely launched Dickman's Folly.

But, he wouldn't quit. He knew something was missing and set out to find it. Here, his background in biology came to the fore, and he realized that no consideration had been given the fish's own physiology.

He found that while fish had preferred temperatures at which they were most comfortable, the optimum-catch temperature, which is the temperature at which a fish feeds most actively and is most likely to be caught, is substantially different.

Enter outdoor writer Larry Mueller. Larry was also skeptical, but after talking to Clyde, agreed to do a story on Steve's system. He soon became so enthused that he gave up the article concept and began to work with Steve and Clyde on the book.

He also convinced Steve that a simple device was necessary for the average fisherman, so a pocket slide calculator was devised.

The calculator uses barometric pressure, water temperature, air temperature and climatic conditions and pulls them together in an easy-to-use method that offers a good prediction of fishing conditions.

For example, if the air temperature is 58 degrees and the weather is cloudy within five hours after a rain, a value of 3.663 is given. This is added to the value of the water temperature and barometric pressure which might be 51 degrees and 30.1 for a 1.08 value. By adding the two, a value of nearly five is derived which means excellent fishing conditions.

There is a range of temperatures and other variables which will give values ranging from 0 to 10. Zero to 1 means poor fishing, 1 to 2 means fair, 2-3 indicates good fishing and 4-10 means let 'er rip.

Steve admits his book is for the "serious" fisherman. And it does boggle the mind of the guy with the old bamboo pole and the worm on the bent hook to see those numbers jumping out at him. But then Steve adds some encouraging words: "Sometimes a worm's the best thing there is."

To which one can only add, "The logic of it is undeniable."

## Sweeteners spur record growth

(Continued from Page 1)

For the six months, sales are \$401.5 million compared to \$274.9 million the previous year. Earnings are \$24.6 million compared to \$4.3 million.

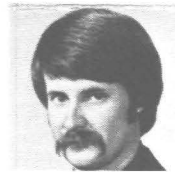
- J. W. Moore is named senior vice president, agri-products. He is succeeded as group vice president, agriproducts, by Dr. R. M. Powers. Dr. Richard Hahn is named director of research and development.
- Plans for an additional multi-million dollar expansion of IsoSweet at Decatur are announced.
- Staley brand pancake syrup sales continue to soar as popular price, high quality and extensive promotional campaigns pay off.
- MAY—Stock split is approved by Staley shareholders at the annual meeting in Decatur. Chairman Donald E. Nordlund outlines the company's sweetener leadership role to more than 300 shareholders in attendance.
- Thirteen men's teams and three women's teams begin play on new softball diamond at Decatur.
- The company announces plans for a 700,000 share stock offering.
- Staley bowling leagues conclude action.
- JUNE—The company exercises its option for purchase of land for plant site in Lafayette, Ind.
- Following an unsuccessful bid by H. J. Heinz to merge with Staley, the company withdraws its proposed public offering of 700,000 shares of common stock citing the "unsettling effects" of the merger proposal.
- Staley research and development reports increased activity in work on use of textured proteins and other soy products in processed meats.
- Field tests of specialty feeds' new automated Day-One baby pig feeder are successful and plans are laid for its mass production.
- Nearly 150 Decatur employees and families trek to St. Louis to see the Cubs and Cards battle.
- Staley sweeteners, proteins, soy flour and food starches are a hit at the Institute of Food Technologists show in Chicago.
- JULY—Quarterly figures again are bright as corn sweetener demand remains strong. For the nine months, sales are \$586.7 million compared to \$434.9 million the first nine months of the previous year. Earnings soar to \$38.7 million compared to \$7.9 million.
- Bernie Steele becomes the first apprentice graduate of a training program at Morrisville.
- Staley technology is incorporated in the production of modified food starches at a joint venture between the company and Nihon Corn Starch Co., Ltd. at the latter's plant in Japan.
- 14 building starts operations. The building, which is to be used for production of Dried Steep Liquor Concentrate (DSLCC) and corn gluten incorporates Staley technology to remove most of the disagreeable odor and blue haze formerly associated with the production of those animal feed ingredients.
- Business Week features Staley growth in its latest publication.
- AUGUST—Three new starch roll dryers are installed at Morrisville. The dryers add to Morrisville's role as a source of manufacture of a complete

food ingredients line by enabling the plant to produce gelatinized starches.

- Lou Doxie retires from the Staley board. R. M. Powers is elected to the board of directors and E. Raymond Stanhope is elected a group vice president at the board's regular quarterly meeting.
- The SuperStars take slow pitch title honors for the men's league while the IsoSweets walk off with the women's crown.
- The board ups the quarterly dividend from 25 cents a share to 40 cents a share.
- SEPTEMBER—An ambitious safety effort for fiscal 1976—the Safety Spirit of '76—is announced.
- Morrisville produces its one billionth pound of IsoSweet.
- Kresge announces that it has chose Staley Imitation Bacon Bits for use at lunch counters in 400 of its stores. It's the biggest order yet for the Bacon Bits, which are handled by the food service division of consumer products.
- A new quarter-mile track for jogging employees and their families is completed at Decatur.
- In one of the most unique kickoffs ever for a Staley United Way campaign, a trio of women's softball teams (all employees) play the officers of the company in a good-time "grudge" match. Who won? The officers, but no one recalls the correct score. Anyway, the event draws nearly 500 spectators and gets what will be a record breaking United Way campaign off to a soaring start.
- OCTOBER—Year-end figures are in. Sales reach a record \$776.7 million and earnings total a record \$50.3 million. That compares to sales the previous year of \$621.3 million and earnings of \$15 million.
- The Decatur plant United Way campaign reaches a record \$124,000 including employee and corporate gifts.
- Staley syrup reports a sales increase of 15 percent from the previous year and is the only major brand to record a share-of-market increase.
- Enthusiasm runs high for the Safety Spirit of '76 with sign-up 100 percent at many locations.
- NOVEMBER—The \$1.2 million waste treatment facility at Decatur starts operations.
- Sta-Puf blue enters the second six months of its national rollout after capturing a 5.6 percent share of market in the first phase and combining with Sta-Puf pink to make the brand name the second in the fabric softener category.
- Directors vote another quarterly dividend increase from 40 cents a share to 45 cents and decide to seek authorization for an additional 2-for-1 stock split at the annual meeting in February 1976. Joseph B. Lanterman, chairman of Amsted Industries is elected to the board.
- A supervisory evaluation program to identify potential first line supervisors is started at Decatur.
- DECEMBER—Soy flour production begins at the protein complex. Full production is set for early 1976.
- Decatur plant continues its amazing safety record of the past six months exceeding more than a million man hours worked without a lost time accident, far ahead of the industry average of 10 per million man hours.



Dick Hanson



Larry Shaw



Roy Elmore

### On the move

#### CORPORATE

**RICHARD HANSON** from industrial engineer to senior industrial engineer

**LARRY SHAW** from supervisor, transportation equipment to sales coordinator, international

#### AGRIPRODUCTS

**SHELIA DRAKE** from assistant analytical chemist to assistant quality control chemist

**ROY ELMORE** from staff chemical engineer to chemical engineer

**SUSAN WELLS** from messenger to production clerk

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Decatur, Ill. 62521

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