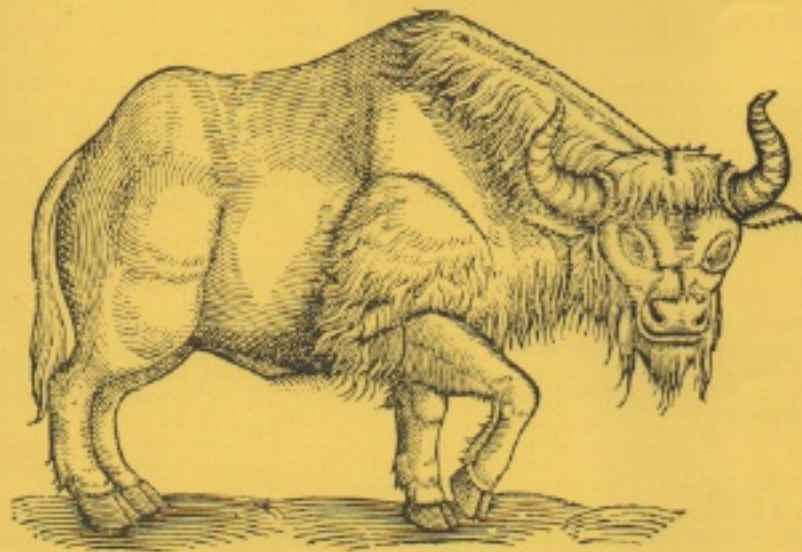


# BISON OR BULL?



## DEFINITION

Bison (*Bison-americanus*) commonly called North American Buffalo:  
Estimated sixty million 1769: Hunted, and in way of population:  
Almost became extinct: Until 1902 when steps were taken to ensure  
it's future.

## DEFINITION

Bison (Bison Well-Frame) commonly called 'system building':  
Estimated fifty thousand houses built on this system up to 1973:  
Numerous defects hunted down: Bated by it's population: Until  
1978 when steps began to ensure this variety became extinct:  
it's only future.

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Compiled by: Basford Flats Tenants Association:  
Old Basford, Nottingham. Released 12th, July 1982.

# INTRODUCTION

The Old Basford flats complex consists of 531 flats in 18 seven storey blocks (medium-rise), and 291 flats in 4 twenty storey tower blocks (high-rise), a total of 822 dwellings. Built entirely on the 'Bison Wall-Frame System' between 1967 and 1970, by Brury & Co Ltd, (later taken over by Francis Parker Contracts) who went into liquidation.

In April 1982, Nottingham City Council Technical Services Department recommended a remedial programme costing over £7.5 million, to the 531 medium-rise flats. The recommendation was based on a report by George Wimpey & Co Construction into just one of the 18 medium-rise blocks called 'Morven'; which took place between November 1981 and March 1982. This report has been criticised as inadequate, both publicly and privately, and Labour councillors rejected the recommendations and called for further evidence.

In May 1982, a further report with 3 options was presented to councillors. These options were, total renovation, total demolition, or a mixture of part renovation part demolition, and yet all these options simply ignored the four tower blocks. Council officers were told to investigate further the part renovation part demolition idea.

Some 5 weeks ago we produced an 8 page report listing 'major defects' in the tower blocks. Since then we have been rapidly collecting reports and information on the Bison System nationally. This is the first time anyone has tried to piece together the National Bison Jigsaw, and we are uncovering a national scandal, 47 authorities with 50,000 Bison flats, and thousands of faults.

This report shows only a fraction of the problems, over the next couple of months we anticipate obtaining far more evidence, and a national meeting of Bison Tenants has now been arranged. On the basis of our evidence to date, we say that the only option for Nottingham City Council is to demolish. If that is not their immediate decision then the only other option is to:-

- (a) Immediately contact all other 47 local authorities for their experience;
  - (b) To get independent surveys to look at all this evidence and investigate the real cost of bringing all Basford flats up to modern standards with a 45 year life.
- We are sure that the inevitable conclusion will be the same as now DEMOLITION. Read our report now, and come to your own conclusions.

## A brief history

In 1947 Concrete Ltd. was a small firm with a turnover of about £½ million, manufacturing Bison re-inforced concrete precast floor units. In 1956 it introduced a system of 4 and 5 storey precast structures, and by 1958 turnover had reached about £8 million. It was in 1961 that they successively introduced the Bison Preferred Dimension Frame based on a limited number of steel members which could be adjusted modularly to provide a very large number of components; many car parks were built using this system.

By 1962 the Bison Wall-Frame System for high rise flats was introduced (turnover reaching about £12 million). Within a year 19 local authorities had placed 25 contracts for over 90 blocks comprising 3,500 dwellings. In 1964 the Bison Low-Rise System was introduced aimed at a market up to 8 storeys and particularly at the fashionable idea of deck access. Within ten years 31,000 high-rise and 23,000 low-rise flats were built using the Bison Wall-Frame System. The first Bison Block was designed by Niall Rhye Davies (1961) was erected in Kidderminster, 1963/4; Bryant Design & Construction who had adopted the system were the contractors.

### SOME BISON FACTS

#### Subsidiaries and Associates:

Bison-Bryant Ltd.  
Bison-Bryant (Saudi Arabia) Ltd.  
Bison Concrete Ltd.  
Bison Concrete (Midlands) Ltd.  
Bison Concrete (Northern) Ltd.  
Bison Concrete (Properties) Ltd.  
Bison Concrete (Scotland) Ltd.  
Bison Concrete (Southern) Ltd.  
Bison Edwards Holdings Ltd.  
Bison (Garages) Ltd.  
Bison Industrial Buildings Ltd.  
Bison International Ltd.  
Bison Leisure Products Ltd.  
National Chemical Industries of Saudi Arabia, bought Bison Ltd. in 1978.  
COUNTRY OF CONTROL SAUDI ARABIA.

#### Parents & Senior Associates:

Bryant Holdings Ltd.  
Bryant Holdings Ltd.  
Bison Group Ltd.  
Bison Group Ltd.  
Bison Group Ltd.  
Bison Group Ltd.  
Bison Group Ltd.  
Bison Group Ltd.  
Bison Group Ltd.  
H.A.T. Group Ltd.  
Bison Group Ltd.  
Bison Group Ltd.  
Bison Group Ltd.  
Bison Group Ltd.

By turnover Bison Group Ltd. are listed Number 622 of the Top 1,000 Companies.

Concrete/Bison: In 1977 Concrete Ltd. changed its name to Bison Group Ltd.

At that time the board was:-

Concrete Ltd. Directors: Sir Kenneth Wood BA, FCA, F10B, (Chairman):

J. Barrett FICE (Deputy Chairman):

C. Wigglesworth (Managing)

P.J. Schryver:

T.S. Lucas MC, TD, :

G. Oylar BSc (Eng) FICE, ACSE, F10B:

D.W. Wood MA:

Bison Group Ltd. Directors:

C.M. Beddow FCA (Chairman):

J.B. Parkinson MLC (Hons) Eng. FICE, F10B, FFB, IASCE, (Managing):

Sheikh H.Y. Al Bedawi (Saudi Arabia):

G.C. Zielinski FCA:

A. Dawson BSc, PhD, FICE, MI Struct. E, MICE:

Ironically it was in 1978 when the first law-suit was filed against Bison by Portsmouth Council to be followed by others, just as the company was sold to Saudi Arabian interests.

## Taking the bull to market

It was the Bryant Group that decided on intensive marketing of the system. Publicity was handled by a one-man public relations firm run by Dennis Howell, ex city councillor and Labour M.P. for Small Heath Birmingham; he later urged the Labour Party Conference to adopt industrialized building. In 1963 he had become a Director of the Bryants Company, until he resigned on becoming a Junior Minister in Harold Wilson's Government in 1964. From 1964 onward Bison Estates appeared throughout the U.K. the main contractors were Bryants, but with several others particularly outside the West Midlands area.

The team of Directors set up to market the Bison/Bryant package, engaged in some extremely vigorous marketing techniques. Managing Director of C. Bryant Ltd. Mr. Maurice Barwick explained "We tried to establish a 'Brand Image'". There were some pretty extensive Christmas Gift Lists given by the company, with up to 2,000 recipients in the local authority, of large quantities of drink and other presents, some very generous indeed.

It was common practice for local West Midland councillors to visit the Bryants Box at Ascot.

Six months after councillors had rejected another industrialized system, Bryants invited them to visit their 'Bison Show Block'. This is the story as told by a councillor involved;

[We decided] that the [Housing Building] Committee should go out and look at these flats when they were up, go out in a bus, a big party. They were just ordinary standard shape blocks—perfectly normal flats with doors and windows and bathrooms and everything. You've got to remember at this time we were building a hundred to a hundred and fifty schemes at a time, flats and all kinds . . .

Anyway, we went in a bus to the site. They had the blocks laid out so [sketches] and the way to the blocks was through this great marquee—which was loaded with drink and, er, food . . . So we stayed there quite a long time and then we went out and looked at the flats. Well by this time they could have been inlaid with gold! In fact they looked pretty awful from the outside—they had this grey and white panelling. Inside they were all right.

We went round and at the end we went into the marquee again and had some more drinks. Somebody asked me what I thought of the flats, and I said [shrugs] 'They're perfectly normal average flats, like hundreds we've done'. Things went on and as we were leaving, at the exit, [it was suddenly decided], 'Right, we'll take five blocks'. Just as if we were buying bags of sweets!"

The Bull was definitely British:

Housing committee members were favourably impressed by what they had seen, "We have heard so much about Continental Systems, and at last we have a British System which seems to solve the problems of large housing authorities on speed and cost".

## Early warnings - ignored !

Old Basford Nottingham:1967: Clerk of Works at the site Mr. James Liggett conducted water penetration tests. Afterwards 4 inches of water remained INSIDE the building. He informed Mr. Gordon Stobbs then of Nottingham City Councils Architects Department(Now head Newark District Council Technical Services) of the results. Also problems in low-rise links and jointing were apparent; these were re-jointed at an unknown extra cost(Estimated Thousands £s) but were still un-satisfactory;Mr. Liggett's tests were ignored and construction went ahead.

Hillingdon London: 1969: The National Building Agency(NBA) wound up earlier this year as a cost cutting of the Department of the Environment(DoE), produced a confidential report for the London Borough of Hillingdon in 1969. But the findings of that report which revealed the widespread defects on 'Bison' of water penetration, spalling concrete and condensation, were not publicised, and there was no government directive as a result.

Monitoring new building was the NBA's foremost task as a section of the DoE; in its board of advisors for example was Sir Kenneth Wood then Chairman of the Bison Group who became a director of the NBA in 1966. Quoting an employee of the NBA, "You can imagine the atmosphere within the agency at the time, it was very difficult if one of your board members could be embarrassed by a public statement, and this obviously had an effect on the decisions that were taken".

Ironically chief architect for Hillingdon at the time the Bison Estates went up was Thurston Williams, who was managing director of the NBA for the last years of its life.

However in 1970 the DoE wrote to all local authorities with Bison Buildings warning them of a number of defects.

Both the NBA and the Building Research Establishment were heavily criticised following the 'Roman Point' Disaster, for their lack of awareness and supervision of industrialized building systems.

## Bison sheds its coat

Bison 'No cause for alarm' October 20th 1978.  
Bison Concrete Ltd. last week denied any cause for widespread alarm about the high-rise Bison Wall-Frame construction, following reports of failures in the press at Portsmouth and Hillingdon. Bison has carried out a nationwide survey into its blocks which has revealed 'no cause for alarm' P.K.Jupp chief executive of Bison Concrete, told Architects Journal, "if we have any responsibility we will put it right".

At Hillingdon a large piece of concrete cladding panel fell off one side of the Boroughs' four high-rise blocks.

At Kidderminster(Wyre Forest Council) an entire cladding panel fell off from eleven storeys up.

At Rugby and at Islington (London) large chunks of concrete regularly fell off cladding panels, the councils had to erect protective canopies around their tower blocks for safety.

A 250 kg. cladding panel fell off a Birmingham tower block on the morning the Hillingdon technical services report was published.

Falling concrete was discovered at Portsmouth in four high-rise blocks in 1977: together with a catalogue of faults in load bearing walls beneath.

There has been cladding panel failure at the Arthur Greenwood Court at Wolverhampton.

## Now its down to the underwear

Mr. Terry Dickie of the London Borough of Hillingdon Council estimated a bill of £1 billion to cover repairs to Bison nationally, "Sometimes its a factory fault sometimes an erection fault". Bison Director John Feacock refused to comment on the estimate, his colleague Brian Bagnall also refused to comment, but added "that the Bison System housing was safer than many traditional methods of building"

### Internal & External Water Penetration: ::

Quote " Drypack insulation was either saturated to such an extent that it was completely useless, or it was missing altogether ". (Manchester)

Quote " It appears drypack insulation was completely missed out of the building specification in some blocks ". (Sedgefield)

Quote " In various positions it was possible to examine the drypack (Dry Mortar filling) although it was of reasonably good quality, it was not always continuous as might be expected ". (Nottingham)

Quote " There are small areas of insulation deficiency, which produce problems disproportionate to the size of the deficiency ". (Hillingdon)

Quote " Many baffles to prevent water penetration are missing, damaged or have slipped, also many horizontal joints between panels are suspect because of damage misalignment or un-satisfactory workmanship. (Manchester)

Quote " Water penetration through joints and cracks is having an adverse effect upon concrete in general, the process is a vicious circle. (Sedgefield)

### Heating Ventilation And Thermal Insulation: ::

Quote " It is obvious that inspection of the form of heating and its intensity, that the thermal insulation to the structural shell is inadequate (Sedgefield)

Quote " Heating and ventilation are not adequate or in balance as was found recently in a pilot improvement study ". (Manchester)

Quote " There have been numerous complaints about the heating system being inadequate, high electricity bills etc., this is only part of the problem (Sedgefield)

Quote " Higher thermal insulation standards would have reduced the exceptional heat losses, thereby reducing the costs to tenants". (Sedgefield)

Quote " Heating is not supplied to bedrooms, it is advisable that additional ducts be fitted to remedy the situation, however the overriding consideration is to the adequacy of the system (Sedgefield)



Electricity: Snake & Fire:.....

Quote " The insulation of the electric has proved inadequate".(Manchester)

Quote " The electric system is in a dangerous condition and the attendant fire risks must not be ruled out".(Sedgefield)

Quote "Snake and fire alarms must be fitted to prevent a disaster" (Hillingdon)

Quote " Fire and smoke will easily spread through gaps between floor and wall panels".(Sedgefield)

Quote " Fire and smoke can enter the ventilation and heating ducts,spreading the hazard from lower floors and preventing a safe escape route".(Hillingdon)

## Health

● Quote:

"Many fungi are harmless enough on their own but may degrade foodstuffs and produce toxic by-products (Afltoxins).They may fail to cause any recognizable infection, while still producing a degree of poor health standards which may persist for many years un-diagnosed. (Manchester)

● Quote:

"It is in my opinion that after 7 years practice in the Old Basford area, that we do get a considerably greater number of respiratory problems from patients of all ages from the Basford Flats Complex. Indeed I was so concerned about this at one stage that I wrote to Dr. Ken Mason Community Physician, voicing my concerns. Legionnaires Disease was the topic of the moment, and despite Dr. Masons reply, I can confirm we had at least one case from the Basford Flats who did have Legionnaires Disease. However it is not the very serious respiratory illnesses that occur so often, but the minor respiratory tract infections of flu, coryza and just general catarrh and stuffiness. These may not be very serious complaints but if got regularly they do of course lead to the deterioration in the quality of living, especially where this is associated with your home. Furthermore, many of my colleagues in the area resist strongly having patients from the Basford Flats, on the grounds of the increased incidence of disease and patient demand. I can confirm that at least my opinions are shared by my colleagues ( A Local Doctor,Nottingham)



